CITATIONS

Type A= 518 Type B= 229
Total 747

Three new Masers located near Herbig-Haro Like nebulosities.
Gyulbudaghian A.L., Rodríguez L.F. and Mendoza-Torres E.

1987, Rev. Mex. Astron. Astrof. 15, 53.
Citations A 23 B 2 25 citast 25

1. Kun M, Aoyama H, Yoshikawa N, Et Al.
Study Of Molecular Clouds And Star Formation In The Region Of Ic 2118
Publ Astron Soc Jpn 53 (6): 1063-1070 2001

2. Beltran Mt, Estalella R, Anglada G, Et Al.
Radio Spectral Indices Of The Powering Sources Of Outflows
Astron J 121 (3): 1556-1568 Mar 2001

3. Aspin C, Reipurth B
Herbig-Haro Flows Near Compact Reflection Nebulae
Mon Not R Astron Soc 311 (3): 522-534 Jan 21 2000

4. Garcia-Lario P, Manchado A, Pych W, Et Al.
Near Infrared Photometry Of Iras Sources With Colours Like Planetary Nebulae. Iii.
Astron Astrophys Sup 126 (3): 479-502 Dec 1997

5. Tapia M, Persi P, Bohigas J, Et Al.
Iras Sources Associated With Small Nebulae In Star Forming Regions: Optical And Near Infrared Images'
Astron J 113 (5): 1769-& May 1997

6. Anglada G, Sepulveda I, Gomez Jf
Ammonia Observations Towards Molecular And Optical Out Flows
Astron Astrophys Sup 121 (2): 255-274 Feb 1997

7. Anglada G, Estalella R, Pastor J, Et Al.
A Cs And Nh3 Survey Of Regions With H2o Maser Emission
Astrophys J 463 (1): 205-223 Part 1 May 20 1996

8. Jenness T, Scott Pf, Padman R
Studies Of Embedded Far-Infrared Sources In The Vicinity Of H2o Masers

.1. Observations
Mon Not R Astron Soc 276 (3): 1024-1040 Oct 1 1995

9. Persi P, Palagi F, Felli M
H2o Masers From Low And Intermediate Luminosity Young Stellar Objects - H2o Masers And Ysos
Astron Astrophys 291 (2): 577-594 Nov 1994

10. Palumbo Ggc, Scappini F, Pareschi G, Et Al.
Ira S-Selected Galactic Star-Forming Regions .1. New 6(16)-]5(23) Water Maser Detections In Molecular Cores North Of Dec+15-Degrees
Mon Not R Astron Soc 266 (1): 123-136 Jan 1 1994

11. Gomez Jf, Torrelles Jm, Estalella R, Et Al.
On The Nature Of The Bipolar Molecular Outflow In Afgl-437
Astrophys J 397 (2): 492-499 Part 1 Oct 1 1992

12. Torrelles Jm, Gomez Jf, Anglada G, Et Al.
The Powering Sources Of The Molecular Outflows In The Afgl-437, Afgl-5142, And Afgl-5157 Regions
Astrophys J 392 (2): 616-621 Part 1 Jun 20 1992

13. Pastor J, Estalella R, Lopez R, Et Al.
A Cs Study Of Star-Forming Regions Previously Mapped In Ammonia
Astron Astrophys 252 (1): 320-330 Dec 1991

14. Verdesmontenegro L, Torrelles Jm, Rodriguez Lf, Et Al.
Molecular Clouds Around Outflow Sources
Astrophys Space Sci 171 (1-2): 161-162 Sep 1990

15. Mendoza Ee, Rodriguez Lf, Chavarriak C, Et Al.
Compact Radio And Infrared Sources Near The Center Of The Bipolar Outflow Ngc-2264d
Mon Not R Astron Soc 246 (3): 518-522 Oct 1 1990

16. Comoretto G, Palagi F, Cesaroni R, Et Al.
The Arcetri Atlas Of H2o Maser Sources
Astron Astrophys Sup 84 (1): 179-225 Jul 1990

17. Verdesmontenegro L, Torrelles Jm, Rodriguez Lf, Et Al. **Further-Studies Of The Role Of Dense Molecular Clouds Around Outflow Sources** Astrophys J 346 (1): 193-200 Part 1 Nov 1 1989

Rodríguez, M.; Rodríguez, L. F.; Gyulbudaghian, A. L.; May, J., VLA **Detection of the Exciting Sources of the HH 288 and HHL59 Outflows**, 2002 RMxAA, 38, 161R

Kun, M.; Prusti, T.; Nikolić, S.; Johansson, L. E. B.; Walton, N. A. **The IC 2118 association: New T Tauri stars in high-latitude molecular clouds**, 2004 A&A, 418, 89K

Lopez, R.; Sanchez, S. F.; Garcia-Lorenzo, B.; Estalella, R.; Riera, A.; Busquet, G. **The nature of HHL 73 from optical imaging and Integral Field Spectroscopy**, 2007, arXiv, 0711, 1521L

López, R.; Sánchez, S. F.; Garcia-Lorenzo, B.; Estalella, R.; Riera, A.; Busquet, G**. The nature of HHL 73 from optical imaging and integral field spectroscopy,** 2008, MNRAS, 384, 464L

Kun, M.; Kiss, Z. T.; Balog, Z. **Star Forming Regions in Cepheus**, 2008, hsf1.book, 136K

Alcalá, J. M.; Covino,; E. Leccia, S. **Orion Outlying Clouds,** 2008, hsf1.book, 801A

Reipurth, B.; Yan, C, **Star Formation and Molecular Clouds toward the Galactic Anti-Center**, 2008, hsf1.book, 869R

Khanzadyan, T.; Movsessian, T. A.; Davis, C. J.; Magakian, T. Y.; Gredel, R.; Nikogossian, E. H**. GM 2-4: a signpost for low- and intermediate-mass star formation**, 2011, MNRAS, 418, 1994K

<u>Water-vapor maser emission from bright, unassociated IRAS point sources.</u>
Scalise E. Jr., Rodríguez L.F. and Mendoza-Torres J.E., 1989, Astron. Astrophys. 221, 105.
Citations A 54 B 3 54

1. Walsh Aj, Lee Jk, Burton Mg
   The Massive Star-Forming Region G323.74-0.26
   Mon Not R Astron Soc 329 (2): 475-480 Jan 11 2002

2. Karnik Ad, Ghosh Sk, Rengarajan Tn, Et Al.
   Study Of Star Formation In Rcw 106 Using Far-Infrared Observations
   Mon Not R Astron Soc 326 (1): 293-302 Sep 1 2001

3. Comeron F, Torra J
   Near-Infrared Imaging Of Compact Hii Regions In Cygnus X
   Astron Astrophys 375 (2): 539-552 Aug 2001

4. Szymczak M, Hrynek G, Kus Aj
   A Survey Of The 6.7 Ghz Methanol Maser Emission From Iras Sources. I. Data
   Astron Astrophys Sup 143 (2): 269-301 Apr 2000

5. Comeron F, Torra J
A Near Infrared Study Of The Hii/Photodissociation Region Dr 18 In Cygnus
Astron Astrophys 349 (2): 605-618 Sep 1999

6. Carral P, Kurtz S, Rodriguez Lf, Et Al.
Vla Continuum Observations Of Suspected Massive Hot Cores
Rev Mex Astron Astr 35 (1): 97-108 Apr 1999

7. Massi F, Giannini T, Lorenzetti D, Et Al.
Star Formation In The Vela Molecular Clouds - Iii. Near Ir Images And Mm Photometry Of D-Cloud Iras Sources
Astron Astrophys Sup 136 (3): 471-490 May 1999

8. Harju J, Lehtinen K, Booth Rs, Et Al.
A Survey Of Sio Emission Towards Interstellar Masers - I. Sio Line Characteristics
Astron Astrophys Sup 132 (2): 211-231 Oct 1998

9. Macleod Gc, Scalise E, Saedt S, Et Al.
Masers In Massive Star-Forming Regions Associated With The Brightest Steep-Spectrum Iras Point Sources
Astron J 116 (4): 1897-1905 Oct 1998

10. Lapinov Av, Schilke P, Juvela M, Et Al.
Studies Of Dense Cores In Regions Of Massive Star Formation - Vi. Multitransitional Cs And Co Observations Of G 261.64-2.09, G
268.42-0.85, G 270.26+0.83 And G 301.12-0.20
Astron Astrophys 336 (3): 1007-1023 Aug 20 1998

11. Codella C, Testi L, Cesaroni R
The Molecular Environment Of H2o Masers: Vla Ammonia Observations
Astron Astrophys 325 (1): 282-294 Sep 1997

12. Hekkert Pl, Chapman Jm
A Search For Oh Maser Emission From Post-Asymptotic Giant Branch Stars
Astron Astrophys Sup 119 (3): 459-481 Nov 1996

13. Juvela M
Studies Of Dense Molecular Cores In Regions Of Massive Star Formation .4. Multitransition Cs-Study Towards Southern H2o Masers In The Longitude Range L=308 Degrees-360 Degrees
Astron Astrophys Sup 118 (2): 191-226 Aug 1996

14. Anglada G, Estalella R, Pastor J, Et Al.
A Cs And Nh3 Survey Of Regions With H2o Maser Emission
Astrophys J 463 (1): 205-223 Part 1 May 20 1996

15. Zinchenko I
Studies Of Dense Molecular Cores In Regions Of Massive Star-Formation .3. Statistics Of The Core Parameters
Astron Astrophys 303 (2): 554-560 Nov 1995

16. Codella C, Palumbo Ggc, Pareschi G, Et Al.
Iras-Selected Galactic Star-Forming Regions .2. Water Maser Detections In The Extended Sample
Mon Not R Astron Soc 276 (1): 57-73 Sep 1 1995

17. Zinchenko I, Lapinov A, Mattila K, Et Al.
Cs Studies Of Dense Cores In Regions Of High-Mass Star-Formation - A Survey Of Southern Molecular Masers
Astrophys Space Sci 224 (1-2): 585-586 Feb 1995

18. Zinchenko I, Mattila K, Toriseva M
Studies Of Dense Molecular Cores In Regions Of Massive Star-Formation .2. Cs J=2-1 Survey Of Southern H2o Masers In The Longitude Range L=260-Degrees-310-Degrees
Astron Astrophys Sup 111 (1): 95-114 May 1995

19. Vanderwalt Dj, Gaylard Mj, Macleod Gc
New Detections Of 5(1)-6(0) A(+)-Methanol Masers Towards Iras Sources
Astron Astrophys Sup 110 (1): 81-98 Apr 1995

20. Codella C, Felli M, Natale V, Et Al.
The Occurrence Of H2o Masers In H-Ii-Regions
Astron Astrophys 291 (1): 261-270 Nov 1994

21. Hughes Va, Macleod Gc
An Analysis Of Iras-Identified H-Ii Regions And Their Radio Properties
Astrophys J 427 (2): 857-866 Part 1 Jun 1 1994

22. Codella C, Felli M, Natale V
H-Ii Regions And Iras Psc Sources - The Reliability Of The Association
Astron Astrophys 284 (1): 233-240 Apr 1994

23. Miralles Mp, Rodriguez Lf, Scalise E
Radio-Continuum, Ammonia, And Water Maser Observations Of Bright,

Unassociated Iras Point Sources
Astrophys J Suppl S 92 (1): 173-188 May 1994

24. Brand J, Cesaroni R, Caselli P, Et Al.
The Arcetri Catalog Of H2o Maser Sources Update
Astron Astrophys Sup 103 (3): 541-572 Mar 1994

25. Palumbo Ggc, Scappini F, Pareschi G, Et Al.
Ira S-Selected Galactic Star-Forming Regions .1. New 6(16)-]5(23) Water Maser Detections In Molecular Cores North Of Dec+15-Degrees
Mon Not R Astron Soc 266 (1): 123-136 Jan 1 1994

26. Palla F, Cesaroni R, Brand J, Et Al.
H2o Masers Associated With Dense Molecular Clouds And Ultracompact Hii-Regions .2. The Extended Sample
Astron Astrophys 280 (2): 599-608 Dec 1993

27. Taylor Gb, Morris M, Schulman E
Water Masers In The Direction Of The Galactic-Center .1. Results From Initial Observations
Astron J 106 (5): 1978-1986 Nov 1993

28. Palagi F, Cesaroni R, Comoretto G, Et Al.
Classification And Statistical Properties Of Galactic H2o Masers
Astron Astrophys Sup 101 (1): 153-193 Oct 1993

29. Schutte Aj, Vanderwalt Dj, Gaylard Mj, Et Al.
Detection Of 35 New 5(1)-6(0)A+-Methanol Masers Towards Iras Sources
Mon Not R Astron Soc 261 (4): 783-794 Apr 15 1993

30. Hughes Va, Macleod Gc
A Comparison Of The Infrared Luminosity And Ionizing Luminosity Of Selected Star Forming Regions
Astron J 105 (4): 1495-1504 Apr 1993

31. Henning T, Cesaroni R, Walmsley M, Et Al.
Maser Search Towards Young Stellar Objects
Astron Astrophys Sup 93 (3): 525-538 Jun 1992

32. Moy Sm, Macdonald Gh, Habing Rj
New Sample Of Young Stellar Objects
Iau Symp (147): 466-475 1991

33. Hekkert Pt
An Oh Survey Of Very Cold Iras Point Sources
Astron Astrophys 248 (1): 209-220 Aug 1991

34. Palla F, Brand J, Cesaroni R, Et Al.
Water Masers Associated With Dense Molecular Clouds And Ultracompact H-Ii Regions
Astron Astrophys 246 (1): 249-263 Jun 1991

35. Benson Pj, Littlemarenin Ir, Woods Tc, Et Al.
A Catalog Of Observations For Stellar Masers
Astrophys J Suppl S 74 (4): 911-1074 Dec 1990

36. Gyulbudaghian Al, Rodriguez Lf, Curiel S
New H2o Masers In Color-Selected Iras Point Sources
Rev Mex Astron Astr 20 (1): 51-54 Jun 1990

Goedhart, S.; Van Der Walt, D. J.; Gaylard, M. J. **Near-Infrared Imaging Of The Environment Of 6.7-Ghz Methanol Masers**, 2002, mnras, 335, 125g

Shepherd, D. S.; Nürnberger, D. E. A.; Bronfman, L. .; **Discovery Of A Massive Protostar Near Iras 18507+0121**, 2004, apj, 602, 850s

Weigelt, G.; Beuther, H.; Hofmann, K.; Meyer, M. R.; Preibisch, T.; Schertl, D.; Smith, M. D.; Young, E. T. **Bispectrum Speckle Interferometry Of The Massive Protostellar Outflow Source Iras 23151+5912**, 2006, a&A, 447, 655w

Reynoso, E. M.; Johnston, S.; Green, A. J.; Koribalski, B. S. **High-Resolution Hi And Radio Continuum Observations Of The Snr G290.1-0.8.** 2006, mnras, 369, 416r

Comerón, F.; Pasquali, A.; Torra, J. **G76.188+0.098: A Newly Born Massive Binary Star**, 2006, a&A, 457, 553c

Miettinen, O.; Harju, J.; Haikala, L. K.; Pomrén, C. **Sio And Ch_3cch Abundances And Dust Emission In High-Mass Star-Forming Cores**. 2006, a&A., 460, 721m

Shepherd, D. S.; Povich, M. S.; Whitney, B. A.; Robitaille, T. P.; Nürnberger, D. E. A.; Bronfman, L.; Stark, D. P.; Indebetouw, R.; Meade, M. R.; Babler, B. L. **Molecular Outflows And A Mid-Infrared Census Of The Massive Star Formation Region Associated With Iras 18507+0121**. 2007, apj, 669, 464s

Cortes, P. C.; Crutcher, R. M; Shepherd, D. S.; Bronfman, L**. Interferometric Mapping Of Magnetic Fields: The Massive Star-Forming Region G34.4+0.23 Mm**. 2008, apj, 676, 464c

Kurayama, T. **Vera Observation Of The Massive Star Forming Region G34.4+0.23**. 2008, iaus, 248, 202k

Ginsburg, A. G.; Bally, J.; Yan, C.; Williams, J. P. **Outflows And Massive Stars In The Protocluster Iras 05358+3543**, 2009, apj, 707, 310g

Sato, M.; Hirota, T.; Reid, M. J.; Honma, M.; Kobayashi, H.; Iwadate, K.; Miyaji, T.; Shibata, K. M. **Distance To G14.33-0.64 In The Sagittarius Spiral Arm: H_2O Maser Trigonometric Parallax With Vera**, 2010, pasj, 62, 287s

Walsh, A. J.; Breen, S. L.; Britton, T.; Brooks, K. J.; Burton, M. G.; Cunningham, M. R.; Green, J. A.; Harvey-Smith, L.; Hindson, L.; Hoare, M. G.; And 11 Coauthors. **.; The H_2O Southern Galactic Plane Survey (Hops) - I. Techniques And H_2O Maser Data**. 2011, mnras, 416, 1764w

2013phdt.....1b
2013/02
High-Resolution Studies Of Circumstellar Material Around Massive Young Stellar Objects
boley, Paul Andrew

☐ 54
2014apj...788..176r
2014/06
Accretion Disks In The Iras 23151+5912 Region
rodríguez-Esnard, T.; Migenes, V.; Trinidad, M. A.

☐ 55 ☑
2015a&A...573a..82c
2015/01,
A Near-Infrared Spectroscopic Survey Of Massive Jets Towards Extended Green Objects
caratti O Garatti, A.; Stecklum, B.; Linz, H. *And 2 More*

Observations Of Extended Green Objects In The 1.35-Cm H_2O Line On The 22-M Pushchino Radio Telescope
GM Rudnitskii, EE Lekht, OS Bayandina, IE Val'tts… - Astronomy Reports, 2016 - Springer

Observations Of H 2 O Maser Sources At 1.35 Cm Associated With Extended Regions Of 4.5-µm
Emission (Indicated As “Green” On Spitzer Survey Maps—So-Called Extended Green Objects, Egos) Are Reported. Egos Are Considered As Characteristic Signposts Of Regions Of Formation …

□ 57
2016A&A...586A..78B , 2016/02,

A Multi-Wavelength Interferometric Study Of The Massive Young Stellar Object IRAS 13481-6124
Boley, Paul A.; Kraus, Stefan; De Wit, Willem-Jan

Emisiones Máseres En Regiones De Formación De Estrellas De Gran Masa:¿ Trazadores De Discos De "JETS"?
JS Umanzor Hernández - 2017 - Tzibalnaah.Unah.Edu.Hn

En La Actualidad Se Trata De Establecer El Rol Que Juegan Los Máseres En El Proceso De Formación De Las Estrellas De Gran Masa. En El Presente Trabajo Se Realiza Un Estudio Global De La Distribución De Emisiones Máseres De Diversas Especies Moleculares (Metanol …

□ 58
2018A&A...609A.125W

2018/02
ATLASGAL - Ammonia Observations Towards The Southern Galactic Plane

- Wienen, M.;
- Wyrowski, F.;
- Menten, K. M.
- *And 5 More*

□ 59
2020arep...64..839A
2020/10

Evolution Of The OH And H_2O Maser Emission In The Active Star-Forming Region IRAS 05358+3543 (S231)

- Ashimbaeva, N. T.;
- Colom, P.;
- Krasnov, V. V.
- *And 4 More*

□ 60
2021apjs..253....2H
2021/03

Extended HNCO, Sio, And HC_3N Emission In 43 Southern Star-Forming Regions

- He, Yu-Xin;
- Henkel, Christian;
- Zhou, Jian-Jun
- *And 9 More*

 61
2021apjs..256....3P
2021/09

Census Of High- And Medium-Mass Protostars. V. CO Abundance And The Galactic X_{CO} Factor

- Pitts, Rebecca L.;
- Barnes, Peter J.

 62
2022apj...928..129Q
2022/04

6 Cm OH Masers In Northern Star Formation Regions

- Qiao, Hai-Hua;
- Shen, Zhi-Qiang;
- Breen, Shari L

Polarization oscillations of a burst source radiation from RATAN 600 observations
Mendoza-Torres J.E. and Korzhavin A.N. 1992, Solnechnye Dannye (Journal of the Russian Academy of Sciences for solar data) No. 6, Pag. 73.
Citations 0

On the maximum of the distribution of weak microwave bursts" (in russsian with abstract in english)
Mendoza-Torres J.E.
1992, Solnechnye Dannye No. 11, pp. 81-90.
Citations 0

Observation of a Multi-component burst with RATAN-600 radiotelescope" (in russian with abstract in english)
Mendoza-Torres J.E. and Korzhavin A.N. 1992, Solnechnye Dannye No. 12, pp. 59-67.
Citations 0

The interferometric pattern of a simple radiointerferometer for a circular source
Mendoza-Torres J.E., 1994, Revista Mexicana de Física, V. 40, No. 4, 654-663.

Citations 0

Time variations of Maser Emission at W31 and W75S
Lekht E. E. Mendoza-Torres J. E. and Sorochenko R.L., 1995, Ap. J., 443, 222-230.
A+1 B+1 hasta 11 enero 2024
Citations A 9 B 6 citast15

16. **Time variations of the ON2 water maser spectrum during 1981-1995.**
Lekht, E. E.; Marquez, A.; Mendoza-Torres, J. E.
Astronomy and Astrophysics Supplement, v.120, p.415-422, 1996

15**. Evolution of H2O maser emission in the direction of the semiregular variable RT Virginis during 1985-1996**
Mendoza-Torres, J. E.; Lekht, E. E.; Berulis, I. I.; Pashchenko, M. I.
A & A Supplement series, Vol. 126, December I 1997, 257-266.

14. **Precessing circumstellar disk models for the H2O maser sources S252A and W31A**
Berulis, I. I.; Lekht, E. E.; Mendoza-Torres, E. J.
Astronomy Reports, Volume 42, Issue 4, July 1998, pp.465-468

13. **Short-term radial-velocity variations of water-vapor maser spectral components in star-forming regions**
Sorochenko, R. L.; Lekht, E. E.; Mendoza-Torres, J. E.
Astronomy Reports, Volume 42, Issue 5, September 1998, pp.592-597

12. **Masers in Star-Forming Regions**
Kylafis, N. D.; Pavlakis, K. G.
The Origin of Stars and Planetary Systems. Edited by Charles J. Lada and Nikolaos D. Kylafis. Kluwer Academic P, 1999

11**. Long-term monitoring of the long-period variable W Hydrae in the 1.35-cm water-vapor radio line**
Rudnitskii, G. M.; Lekht, E. E.; Berulis, I. I.
Astronomy Letters, Volume 25, Issue 6, June 1999, pp.398-410

10. **Flare activity of the long-period variable star R Leonis**
Esipov, V. F.; Pashchenko, M. I.; Rudnitskii, G. M.; Fomin, S. V.
Astronomy Letters, Volume 25, Issue 10, October 1999, pp.672-677

6. **A study of the kinematics of the H2O maser sources S269 and W75S from long-term monitoring**
Lekht, E. E.; Silant'ev, N. A.; Mendoza-Torres, J. E.; Pashchenko, M. I.; Krasnov, V. V.
Astronomy and Astrophysics, v.377, p.999-1006 (2001)

7. **Variability of the H2O maser associated with the Mira variable RS Virginis**
Lekht, E. E.; Mendoza-Torres, J. E.; Rudnitskij, G. M.; Tolmachev, A. M.
Astronomy and Astrophysics, v.376, p.928-940 (2001)

8. **Variations of the H2O Maser Emission of W51M in 1981-1998**
Samodurov, V. A.; Logvinenko, S. V.
Astronomy Reports, Volume 45, Issue 5, May 2001, pp.339-349, 2001

9. **Variability of the H_2O maser associated with U Orionis**
Rudnitskij, G. M.; Lekht, E. E.; Mendoza-Torres, J. E.; Pashchenko, M. I.; Berulis, I. I.
Astronomy and Astrophysics Supplement, v.146, p.385-395, 200

4. **Water maser emission in IC 342**
Tarchi, A.; Henkel, C.; Peck, A. B.; Menten, K. M.
Astronomy and Astrophysics, v.385, p.1049-1055 (2002)

5. **Time variations of water masers**
Liljeström, T.; Gwinn, C. R.
Cosmic Masers: From Proto-Stars to Black Holes, IAU Symposium #206, held 5-10 March 2001 in Angra dos Reis, Rio de Janeiro, Brazil. Edited by Victor Mineese and Mark Reid, San Francisco: Astronomical Society of the Pacific, 2002., p.43

3. **The H_2O Maser Toward IRAS 06308+0402**
Pashchenko, M. I.; Lekht, E. E.; Tolmachev, A. M.
Astronomy Letters, vol. 29, p. 731-736 (2003)

2. **Observations of Late-Type Variable Stars in the Water Vapor Radio Line. The Long-Period Variable R Cassiopeia**
Pashchenko, M. I.; Rudnitskii, G. M.
Astronomy Reports, vol. 48, Issue 5, p.380-392, 2004

1**. Monitoring of the H2O Maser W31(2) in 1981-2003**
Lekht, E. E.; Munitsyn, V. A.; Tolmachev, A. M.
Astronomy Reports, vol. 49, Issue 1, p.44-56, 2005

H_2O and OH masers associated with cold infrared sources

P Colom, EE Lekht, MI Pashchenko, GM Rudnitskii… - Astronomy Letters, 2015 - Springer
We present the results of our monitoring of four maser sources associated with cold infrared sources. The observations were performed in the water-vapor line at 1.35 cm with the 22-m radio telescope at the Pushchino Radio Astronomy Observatory and in the hydroxyl lines at …

Variability of Interstellar Water Vapor Masers

JE Mendoza-Torres, EE Lekht - Highlights of Astronomy, 1998 - cambridge.org
We present some results of observations of H2O masers (1.35 cm line) in Star-Forming Regions. The observations have been made from the beginning of the eighties at the 22 m radiotelescope at Pushchino, Russia (Lekht et al. 1995). The time interval between two …

An investigation into the variability of methanol and hydroxyl masers in the star-forming region G12. 89+ 0.49

MC Langa - 2006 - repository.nwu.ac.za
It is now widely accepted that 6.7 GHz and 12.2 GHz class I1 methanol masers are signposts of very young high mass star-forming regions. The exact location of these masers is still a matter of debate, they may be in disks or shocks near these objects. Hydroxyl masers also …

Observations of extragalactic H2O masers in bright IRAS sources

A Tarchi, C Henkel, AB Peck… - arXiv preprint astro …, 2003 - pdfs.semanticscholar.org
We report the first results of an ongoing survey at 22GHz with the 100-m Effelsberg telescope to search for water maser emission in bright IRAS sources. We have detected water vapor emission in IC 342. The maser, associated with a star forming region~ 10 …

New results of the study of H_2O masers in star formation regions

EE Lekht, JE Mendoza-Torres - Astronomical and Astrophysical …, 1999 - Taylor & Francis
New results of the study of H2O masers in the regions of star formation are presented. They reflect the global character of separated H2O maser variations–the anticorrelation of the fluxes of individual H2O groups of the features; the simultaneous velocity drift of the H2O …
Artículos relacionados Las 2 versiones

Cosmic MASERs: From Protostars to Blackholes

IA U Symposium, Vol. 206, 2002

V Migenes, MJ Reid - … of the 206th …, 2002 - Astronomical Society of the pacific
Artículos relacionados
[PDF] researchgate.net

 2019ARep...63..814C
2019/10

Observations of Maser Emission in the Star-Forming Region G43.8-0.1. II. H_2O Maser Emission at 1.35 cm

- Colom, P.;
- Ashimbaeva, N. T.;
- Lekht, E. E.
- *and 4 more*

□ 22 □
2021MNRAS.500.3425M
2021/01

Systematic velocity drifts of methanol masers associated with G9.62+0.20E

- MacLeod, G. C.;
- Chibueze, J. O.;
- Sanna, A.

Study of the water maser in the source ON1
Lekht, E. E.; Mendoza-Torres, E.; Sorochenko, R. L.
Astronomy Reports, Volume 39, Issue 1, January 1995, pp.34-41, 1995 (in russian, 1995, Astron. Zh., V. 72, pp. 39-47).
Citations A2 B 4 citast6

Long-term study of water maser emission associated with young stellar objects-I. The database
R Valdettaro, F Palla, J Brand, R Cesaroni… - Astronomy & …, 2002 - aanda.org

We present the results of more than 10 years of monitoring of the water vapor maser emission in 14 star forming regions obtained with the Medicina 32-m radiotelescope. The sample of objects covers a large range of luminosities of the associated FIR sources. In …

Variations of the H_2O maser emission of W51M in 1981–1998
VA Samodurov, SV Logvinenko - Astronomy Reports, 2001 - Springer

The results of spectral monitoring of the maser source W51M carried out in the water-vapor line at 1.35 cm (22GHz) on the 22-m telescope of the Pushchino Radio Astronomy Observatory in 1981–1998 are reported and interpreted. Long-term variations of the maser …

Citado por 9 Artículos relacionados Las 9 versiones

A possible formation mechanism of the asymmetry in the H_2O maser emission line
NA Silant'ev, EE Lekht, JE Mendosa-Torres… - Astronomy Letters, 2002 - Springer

We present a possible formation mechanism of the asymmetry in the maser emission line of H 2 O sources associated with star-forming regions. Observations with the RT-22 radio telescope at the Pushchino Radio Astronomy Observatory are used. We analyze the line …

Results of a long-term monitoring of the 1.35-cm water-vapor maser source ON 1 (1981–2013)
EE Lekht, VV Krasnov, AM Tolmachev - Astronomy Letters, 2014 - Springer

We present the results of our long-term monitoring of the 1.35-cm water-vapor maser source ON 1 performed at the 22-m radio telescope of the Pushchino Radio Astronomy Observatory from 1981 to 2013. Maser emissionwas observed in a wide range of radial velocities, from …

On the cyclic activity of H_2O masers in star formation regions
EE Lekht - Astronomical & Astrophysical Transactions, 1996 - Taylor & Francis

Data on the time variability of maser sources of the H2O lines in star forming regions are analyzed. We find three types of variability at timescales of four to ten years: sinusoidal, periodic with variable amplitude, and alternating active and quiescent states. The long-term …

Variability of Interstellar Water Vapor Masers
JE Mendoza-Torres, EE Lekht - Highlights of Astronomy, 1998 - cambridge.org

We present some results of observations of H2O masers (1.35 cm line) in Star-Forming Regions. The observations have been made from the beginning of the eighties at the 22 m radiotelescope at Pushchino, Russia (Lekht et al. 1995). The time interval between two …

On the variability of water emission at S128
Berulis I.I., Lekht E.E. and Mendoza-Torres J.E. (in russian and english), 1995, Astron.Zh., T. 72, No. 4, P. 468-484.
A 3 B 4 citast7
Citations A+0 B+1 hasta 11 enero 2024

Variations in the H2O Maser Emission of the source G43.8-0.1 in 1981-1994
Lekht, E. E.; Lekht, E. E.
Astronomicheskij Zhurnal, vol. 72, p. 532, 1995

Time variations of the ON2 water maser spectrum during 1981-1995.
Lekht, E. E.; Marquez, A.; Mendoza-Torres, J. E.
Astronomy and Astrophysics Supplement, v.120, p.415-422, 1996

Main parameters of turbulence in star-forming regions from observations of H2O maser emission
Lekht, E. E.; Mendoza-Torres, J. E.; Silant'ev, N. A.
Astronomy Reports, Volume 43, Issue 4, April 1999, pp.209-215

Variations of the H2O Maser Emission of W51M in 1981-1998
Samodurov, V. A.; Logvinenko, S. V.
Astronomy Reports, Volume 45, Issue 5, May 2001, pp.339-349

Cyclic Activity of the Water-Vapor Maser in S128
Lekht, E. E.; Mendoza-Torres, J. E.; Berulis, I. I.
Astronomy Reports, Volume 46, Issue 1, January 2002, pp.57-66

Long-term study of water maser emission associated with young stellar objects-I. The database

R Valdettaro, F Palla, J Brand, R Cesaroni… - Astronomy & …, 2002 - aanda.org

We present the results of more than 10 years of monitoring of the water vapor maser emission in 14 star forming regions obtained with the Medicina 32-m radiotelescope. The sample of objects covers a large range of luminosities of the associated FIR sources. In …

2018ARep...62..609A
2018/09

Observations of OH and H_2O Maser Emission in the Star-Forming Region S128

- Ashimbaeva, N. T.;
- Colom, P.;
- Lekht, E. E.

Evolution of the H2O maser emission in S252A between 1981 and 1995
Berulis, I. I.; Lekht, E. E.; Mendoza-Torres, E., Astronomy Reports, Volume 40, Issue 3, May 1996, pp.329-337, 1996 (Astron.Zh.T. 73, No. 3, pp.367-376, 1995.)
A 2 B 1 citast3
A +0 B + 1 p17 hasta 11 enero 2024
Citations A 2 B 2 citast4

Influence of turbulence on the shape of a spectral line-The analytical approach
NA Silant'ev, EE Lekht, JE Mendoza-Torres… - Astronomy & …, 2006 - aanda.org

We consider the propagation of a spectral-line radiation in a correlated turbulent atmosphere. The ensembles of realizations of turbulent velocities $\vec {u}(\vec {r}, t) $ and optical depth $\tau_ {\nu} $ are assumed to be Gaussian. We investigate the explicit …

Time variations of water masers
T Liljeström, CR Gwinn - Symposium-International Astronomical …, 2002 - cambridge.org

The strong water maser line at 22 GHz is an excellent tool for studying shocked and turbulent interstellar regions, especially, if simultaneous single-dish and VLBI data are available. After a brief review of 22 GHz time variation studies, we focus on effects caused by …

Cosmic MASERs: From Protostars to Blackholes

IA U Symposium, Vol. 206, 2002
V Migenes, MJ Reid - … of the 206th …, 2002 - Astronomical Society of the pacific

2019ARep...63.1022A
2019/12

Evolution of the H^2O Maser Emission in the Star-Forming Region S252A

- Ashimbaeva, N. T.;
- Colom, P.;
- Lekht, E. E

Time variations of the ON2 water maser spectrum during 1981-1995
Lekht E.E., Marquez A. and Mendoza-Torres J.E., 1996, AASS 120, pp. 415-422.
Citations A 6 B 1 Citast7

Marquez, A.; Mendoza-Torres, J. E.; Lekht, E. E. **Variation of spectral features in the ON2 water maser**. 1998, A&AS, 128, 1M

Hunter, T. R.; Testi, L.; Zhang, Q.; Sridharan, T. K. **Molecular Jets and H_2O Masers in the AFGL 5142 Hot Core**. 1999, AJ, 118, 477H

Yu, Z**. Simultaneous observations of the OH maser at 1665 and 1667 MHZ in ON2.** 2000,Ap&SS, 274, 689Y

Yu, Z. **New observation of the OH 1667 MHz maser in the central part of ON2**. 2000, ChA&A, 24, 56Y

Liljeström, T.; Gwinn, C. R. **Time variations of water masers**. 2002, IAUS, 206, 43L

Yu, Z. Y. **Observation and study of OH1665 and OH1667MHz masers in the west region of ON2(C).** 2003, AcASn, 44, 249Y

Yu, Z. **Observation and study of OH1665 and 1667 MHz masers in the west of ON2(C).** 2003, ChA&A, 27, 383Y

Lekht, E. E.; Tolmachev, A. M.; Rudnitskii, G. M. .; **On a new cluster of H2O maser spots in the source ON2**. 2009,AstL,32, 132L

Flare activity of the Water Maser in S252A, 1996
Lekht E.E., Berulis I.I and Mendoza-Torres J.E. Astron. Zh. T.73, No.6, pp. 844-849.
A 0 B 1
A +1 B +0 P19
Citations A 1 B 1

Influence of turbulence on the shape of a spectral line. The analytical approach
Silant'ev, N. A.; Lekht, E. E.; Mendoza-Torres, J. E.; Rudnitskij, G. M.
Astronomy and Astrophysics, Volume 453, Issue 3, July III 2006, pp.989-1002, 2006

□ 2
2019ARep...63.1022A
2019/12

Evolution of the H^2O Maser Emission in the Star-Forming Region S252A

- Ashimbaeva, N. T.;
- Colom, P.;
- Lekht, E. E

Time variations of water vapor masers in star-forming regions
Mendoza-Torres, J. E.; Lekht, E. E., Time variations of water vapor masers in star-forming regions, 1997AIPC..393..197M , 1997/02
A 1 B 0 pagina 19
Citations A 1 B 0 Citast1

2019PaReL.120....1B 2019/04

A Joint Spectral Similarity Measure for Graphs Classification

- Bay-Ahmed, Hadj-Ahmed;
- Boudraa, Abdel-Ouahab;
- Dare-Emzivat, Delphine

Evolution of H2O maser emission in the direction of the semiregular variable RT Virginis during 1985-1996, 1997

Mendoza-Torres J.E., Lekht E.E., Berulis I.I and Pashchenko M.I., Astron. Astrophys. Suppl. Ser. 126, pp. 257-266.

A 6 B 1 Citast7
A+1 B+0 P20 11 ENERO 2024
Citations A 7 B 1 Citast8

A MERLIN movie of mass-loss from RT Vir, 1999
Richards, A. M. S.; Cohen, R. J.; Bains, I.; Yates, J. A.
Asymptotic Giant Branch Stars, IAU Symposium #191, Edited by T. Le Bertre, A. Lebre, and C. Waelkens. ISBN: 1-886733-90-2 LOC: 99-62044. p. 315, 199

Multiwavelength Studies of Mira Ceti-type Variable Stars, 1999
Esipov, V. F.; Pashchenko, M. I.; Rudnitskij, G. M.; Kozin, M. V.; Lekht, E. E.; Nadjip, A. E.; Fomin, S. V.
Asymptotic Giant Branch Stars, IAU Symposium #191, Edited by T. Le Bertre, A. Lebre, and C. Waelkens. ISBN: 1-886733-90-2 LOC: 99-62044. p. 201, 199

Dynamics of the circumstellar envelope of RT Virginis on the basis of the H 2O maser monitoring
Lekht, E. E.; Mendoza-Torres, J. E.; Pashchenko, M. I.; Berulis, I. I.
Astronomy and Astrophysics, v.343, p.241-250 (1999)

Sub-au imaging of water vapour clouds around four asymptotic giant branch stars
Bains, I.; Cohen, R. J.; Louridas, A.; Richards, A. M. S.; Rosa-González, D.; Yates, J. A.
Monthly Notice of the Royal Astronomical Society, Volume 342, Issue 1, pp. 8-32, 2003

Detection of 1612 MHz OH emission in the semiregular variable stars RT Vir, R Crt and W Hya
Etoka, S.; Le Squeren, A. M.; Gerard, E.
Astronomy and Astrophysics, v.403, p.L51-L54 (2003)

Shintani, M.; Imai, H.; Ando, K.; Nakashima, K.; Hirota, T.; Inomata, N.; Kai, T.; Kameno, S.; Kijima, M.; Kobayashi, H.; and 18 coauthors. **Statistical Properties of Stellar H2O Masers --- Results of Three-Year Single-Dish Observations with the VERA Iriki Telescope.** 2008, PASJ, 60, 1077S

Richards, A. M. S.; Elitzur, M.; Yates, J. A. **Observational evidence for the shrinking of bright maser spots**. 2011, A&A, 525ª, 56R

Richards, A. M. S.; Etoka, S.; Gray, M. D.; Lekht, E. E.; Mendoza-Torres, J. E.; Murakawa, K.; Rudnitskij, G**.; Evolved star water maser cloud size determined by star size**. 2012, A&A, 546ª, 16R

2020A&A...644A..45B
2020/12
cited: 1
Water vapour masers in long-period variable stars. II. The semi-regular variables R Crt and RT Vir

- Brand, J.;
- Engels, D.;
- Winnberg, A

Variation of spectral features in the ON2 water maser
Marquez A., Mendoza-Torres J.E. and Lekht E.E.,1998 , Astron. Astrophys. Suppl. Ser. 128, pp. 1-6.

A 2 B 1 Citast3

A +1 B +0 P21 11 ENERO 2024

Citations A 3 B 1 Citast4

Grids of stellar models. VIII. From 0.4 to 1.0 {Msun} at Z=0.020 and Z=0.001, with the MHD equation of state
Charbonnel, C.; Däppen, W.; Schaerer, D.; Bernasconi, P. A.; Maeder, A.; Meynet, G.; Mowlavi, N.
Astronomy and Astrophysics Supplement, v.135, p.405-413, 199

Long-term study of water maser emission associated with young stellar objects - I. The database
Valdettaro R, Palla F, Brand J, et al.
ASTRONOMY & ASTROPHYSICS 383 (1): 244-266 FEB 2002
Times Cited: 5

Time variation of the water maser in ON2
Lekht, E. E.; Trinidad, M. A.; Mendoza-Torres, J. E.; Rudnitskij, G. M.; Tolmachev, A. M.
Astronomy and Astrophysics, Volume 456, Issue 1, September II 2006, pp.145-150, 2006

Lekht, E. E.; Slysh, V. I.; Tolmachev, A. M. **Evolution of the H2O Maser Emission Zone . in ON2 N**, 2010, ARep, 54, 509L

2020ARep...64..586A
2020/07
cited: 1

Evolution of OH and H_2O Maser Emission in the Active Star Formation Region NGC 2071

- Ashimbaeva, N. T.;
- Colom, P.;
- Krasnov, V. V

Precessing Circumstellar Disk Models for the H2O Maser Sources S252A and W31A, 1998
Berulis I.I., Lekht E.E. and Mendoza-Torres J.E. Astron. Zh. T.75, No.4, pp. 527-531.
Citations A 3 B 1 citas4

1. **Grids of stellar models. VIII. From 0.4 to 1.0 {Msun} at Z=0.020 and Z=0.001, with the MHD equation of state**
Charbonnel, C.; Däppen, W.; Schaerer, D.; Bernasconi, P. A.; Maeder, A.; Meynet, G.; Mowlavi, N.
Astronomy and Astrophysics Supplement, v.135, p.405-413, 1999

2. **Stellar masers: A review**
Diamond PJ
IAU SYMPOSIA (206): 253-264 2002

3. **Expansion of the R4 H2O maser arc near Cepheus A HW2**
Gallimore JF, Cool RJ, Thornley MD, et al.
ASTROPHYSICAL JOURNAL 586 (1): 306-318 Part 1 MAR 20 2003
Times Cited: 6

H_2O and OH masers associated with cold infrared sources
P Colom, EE Lekht, MI Pashchenko, GM Rudnitskii… - Astronomy Letters, 2015 - Springer

We present the results of our monitoring of four maser sources associated with cold infrared sources. The observations were performed in the water-vapor line at 1.35 cm with the 22-m radio telescope at the Pushchino Radio Astronomy Observatory and in the hydroxyl lines at …

Short-Term Radial-Velocity Variations of Water-Vapor Maser Spectral Components in Star-Forming Regions
Sorochenko R.L., Lekht E. E. and Mendoza-Torres J. E., 1998, Astron. Zh. T.75, pp. 674-680.
Citations A 0 B 2

1. **The maser source S140-H2O as a protoplanetary disk**
Lekht EE, Sorochenko RL
ASTRONOMY REPORTS 45 (2): 113-119 FEB 2001
Times Cited: 5

Results of Long-Term Monitoring of Maser Emission in the Star-forming Region G 10.623–0.383
P Colom, EE Lekht, MI Pashchenko, GM Rudnitskii… - Astronomy Reports, 2017 - Springer

The results of a study of the maser source G 10.623-0.383 in the λ= 1.35 cm H 2 O line using the 22-mradio telescope of the Pushchino Radio AstronomyObservatory (Russia) and in the main hydroxyl lines (λ= 18 cm) using the Nanэay Radio Telescope (France) are presented …

Artículos relacionados Las 5 versiones

Dynamics of the circumstellar envelope of RT Virginis on the basis of the H2O maser monitoring

Lekht E.E., Mendoza-Torres J.E., Pashchenko M.I and Berulis I.I., 1999, Astron. Astrophys. 343, pp. 241-250.

A 8 B 4

A+2 B+0 P23 11 ENERO 2024

Citations A 10 B 4

1**. Variability of the H2O maser associated with U Orionis**

Rudnitskij GM, Lekht EE, Mendoza-Torres JE, et al.

ASTRONOMY & ASTROPHYSICS SUPPLEMENT SERIES 146 (3): 385-395 NOV 2000

Times Cited: 7

2. **Variability of the H_2O maser associated with U Orionis**

Rudnitskij, G. M.; Lekht, E. E.; Mendoza-Torres, J. E.; Pashchenko, M. I.; Berulis, I. I.

Astronomy and Astrophysics Supplement, v.146, p.385-395, 200

3. **Determining the Period of the Long-Period Activity of the Water-Vapor Maser in W75N**

Lekht, E. E.; Krasnov, V. V.

Astronomy Letters, vol. 26, p. 38-48 (2000)

4. **Variability of the H2O maser associated with the Mira variable RS Virginis**

Lekht EE, Mendoza-Torres JE, Rudnitskij GM, et al.

ASTRONOMY & ASTROPHYSICS 376 (3): 928-940 SEP 2001

Times Cited: 4

5. **Long-term study of water maser emission associated with young stellar objects - I. The database**

Valdettaro R, Palla F, Brand J, et al.

ASTRONOMY & ASTROPHYSICS 383 (1): 244-266 FEB 2002

Times Cited: 5

6. **Sub-au imaging of water vapour clouds around four asymptotic giant branch stars**

Bains I, Cohen RJ, Louridas A, et al.

MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY 342 (1): 8-32 JUN 11 2003

Times Cited: 11

7. **The three-dimensional kinematics of water masers around the semiregular variable RT Virginis**

Imai H, Shibata KM, Marvel KB, et al.

ASTROPHYSICAL JOURNAL 590 (1): 460-472 Part 1 JUN 10 2003

Times Cited: 0

8**. Detection of 1612 MHz OH emission in the semiregular variable stars RT Vir, R Crt and W Hya**
Etoka S, Le Squeren AM, Gerard E
ASTRONOMY & ASTROPHYSICS 403 (3): L51-L54 JUN 2003
Times Cited: 2

9**. (SiO)-Si-28 v=1 and v=2, J=1-0 maser variability in evolved stars. Eleven years of short spaced monitoring**
Pardo JR, Alcolea J, Bujarrabal V, et al.
ASTRONOMY & ASTROPHYSICS 424 (1): 145-156 SEP 2004
Times Cited: 5

10. **Variability of the H2O maser associated with the M-supergiant S Persei**
Lekht EE, Rudnitskij GM, Mendoza-Torres JE, et al.
ASTRONOMY & ASTROPHYSICS 437 (1): 127-U69 JUL 2005

Lekht, E. E.; Rudnitskij, G. M.; Mendoza-Torres, J. E.; Tolmachev, A. M. **Variability of the H2O maser associated with the M-supergiant S Persei**. 2005,A&A, 437, 127L

Lekht, E. E.; Munitsyn, V. A.; Krasnov, V. V.**Chain-type structure in the H2O maser NGC 7538N**. 2007, ARep, 51, 27L

Winnberg, A.; Engels, D.; Brand, J.; Baldacci, L.; Walmsley, C. M. **Water vapour masers in long-period variable stars. I. RX Bootis and SV Pegasi.** 2008, A&A, 482, 831W

Shintani, M.; Imai, H.; Ando, K.; Nakashima, K.; Hirota, T.; Inomata, N.; Kai, T.; Kameno, S.; Kijima, M.; Kobayashi, H.; and 18 coauthors. **Statistical Properties of Stellar H2O Masers --- Results of Three-Year Single-Dish Observations with the VERA Iriki Telescope**. 2008, PASJ, 60, 1077S

Richards, A. M. S.; Elitzur, M.; Yates, J. A. **Observational evidence for the shrinking of bright maser spots**. 2011, A&A, 525A, 56R

Richards, A. M. S.; Etoka, S.; Gray, M. D.; Lekht, E. E.; Mendoza-Torres, J. E.; Murakawa, K.; Rudnitskij, G.; Yates, J. A. **Evolved star water maser cloud size determined by star size**. 2012, A&A, 546A, 16R

Radio spectroscopy of late-type variable stars
Rudnitskij, G.M.
Year the Document was Publish 2008

Source of the Document Journal of Physical Studies
Number of Documents that reference this Document 0
Show record link row
View at Publisher

Variability of the OH and H_2O maser emission toward AS 501
NT Ashimbaeva, P Colom, VV Krasnov, EE Lekht… - Astronomy Reports, 2017 - Springer

The results of observations of OH (λ= 18 cm) and H 2 O (λ= 1.35 cm) masers toward AS 501 obtained with the Nançay Observatory Radio Telescope (France) and the 22-m radio telescope of the Pushchino Radio Astronomy Observatory (Russia), respectively, are …

 2020A&A...644A..45B
2020/12

Water vapour masers in long-period variable stars. II. The semi-regular variables R Crt and RT Vir

- Brand, J.;
- Engels, D.;
- Winnberg, A.

 17
2023PASJ...75.1183I
2023/12

FLASHING: Project overview

- Imai, Hiroshi;
- Hamae, Yuhki;
- Amada, Ke

Main parameters of turbulence in Star-Forming Regions from observations of H2O maser emission
Lekht E.E., Mendoza-Torres J.E., Silantiev N., 1999, Astron. Zh. 43, pp. 209-215.

A 5 B 1 citas 6

A +1 B +1 p26

Citations A 6 B 2 citas 8

1**. A study of the kinematics of the H2O maser sources S269 and W75S from long-term monitoring**
Lekht EE, Silant'ev NA, Mendoza-Torres JE, et al.
ASTRONOMY & ASTROPHYSICS 377 (3): 999-1006 OCT 2001

Times Cited: 5

2. **Time variations of water masers**
Liljestrom T, Gwinn CR
IAU SYMPOSIA (206): 43-50 2002
Times Cited: 0

3. **Merlin and puschino observations of H2O masers in outer galactic SFR S128N**
Richards AMS, Cohen RJ, Crocker M, et al.
ASTROPHYSICS AND SPACE SCIENCE 295 (1-2): 19-25 2005
Times Cited: 0
View full text from the publisher

4. **Dense gas diagnostics: Maser excitation and variability**
Gray M
ASTROPHYSICS AND SPACE SCIENCE 295 (1-2): 309-318 2005
Times Cited: 0
View full text from the publisher

Maser Sources in Astrophysics
M Gray - 2012 - books.google.com

Masers are observed at a range of scales-from comets, through star-forming clouds, to galactic nuclei-and have many astrophysical applications, for example measuring cosmological distances. Written for postgraduate students and professional researchers in …

Citado por 56 Artículos relacionados Las 5 versiones

A new 3D maser code applied to flaring events
MD Gray, L Mason, S Etoka - Monthly Notices of the Royal …, 2018 - academic.oup.com

We set out the theory and discretization scheme for a new finite-element computer code, written specifically for the simulation of maser sources. The code was used to compute fractional inversions at each node of a 3D domain for a range of optical thicknesses …

Citado por 4 Artículos relacionados Las 7 versiones

2018MNRAS.477.2628G
2018/06

A new 3D maser code applied to flaring events

- Gray, M. D.;
- Mason, L.;

- Etoka, S

Variability of the H2O maser associated with U Orionis

Rudnitskij G.M., Lekht E.E., Mendoza-Torres J.E., Pashchenko M.I., Berulis I.I., , 2000, Astronomy and Astrophys. Suppl. Ser. V. 146, P. 385-395.
A 6 B 4 Citast 10
A+0 B+1 P28

Citations A 6 B 5 Citast 11

1. **Variability of the H2O maser associated with the Mira variable RS Virginis**
Lekht EE, Mendoza-Torres JE, Rudnitskij GM, et al.
ASTRONOMY & ASTROPHYSICS 376 (3): 928-940 SEP 2001
Times Cited: 4

2. **Molecular masers in variable stars**
Rudnitskij GM
PUBLICATIONS OF THE ASTRONOMICAL SOCIETY OF AUSTRALIA 19 (4): 499-504 2002
Times Cited: 1

3. **Sub-au imaging of water vapour clouds around four asymptotic giant branch stars**
Bains I, Cohen RJ, Louridas A, et al.
MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY 342 (1): 8-32 JUN 11 2003
Times Cited: 11

4**. Episodes of emission lines in the spectra of red giants as signatures of remnant planetary systems**
Rudnitskij GM
IAU SYMPOSIA (202): 115-117 2004
Times Cited: 0

5. **Observations of late-type variable stars in the water vapor radio line. The long-period variable R cassiopeia**
Pashchenko MI, Rudnitskii GM
ASTRONOMY REPORTS 48 (5): 380-392 MAY 2004
Times Cited: 1

6. **Long-term monitoring of the long-period variable Y cassiopeiae in the 1.35-cm water-vapor line**
Rudnitskii GM, Pashchenko MI
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 31
(11): 760-766 NOV 2005
Times Cited: 0

7. **Variability of the H2O maser associated with the M-supergiant S Persei.** Lekht EE, Rudnitskij GM, Mendoza-Torres JE, et al. ASTRONOMY & ASTROPHYSICS 437 (1): 127-U69 JUL 2005
Times Cited: 0

Diamond, P. J. **Stellar masers: a review**. 2002, IAUS, 206, 253D

Murakawa, K.; Yates, J. A.; Richards, A. M. S.; Cohen, R. J.; van Langevelde, H. J. **A study of OH and H2O masers in the circumstellar envelopes around Mira.** 2002, evn, conf, 219M

Bains, I.; Cohen, R. J.; Louridas, A.; Richards, A. M. S.; Rosa-González, D.; Yates, J. A. **Sub-au imaging of water vapour clouds around four asymptotic giant branch stars 2003**, MNRAS, 342, 8B

Pashchenko, M. I.; Rudnitskii, G. M**. Observations of Late-Type Variable Stars in the Water Vapor Radio Line. The Long-Period Variable R Cassiopeia**. 2004, ARep, 48, 380P

Lekht, E. E.; Rudnitskij, G. M.; Mendoza-Torres, J. E.; Tolmachev, A. M. **Variability of the H2O maser associated with the M-supergiant S Persei**. 2005, A&A, 437, 127L

Rudnitskii, G. M.; Pashchenko, M. I**. Long-Term Monitoring of the Long-Period Variable Y Cassiopeiae in the 1.35-cm Water-Vapor Line.** 2005, AstL, 31, 760R

Shintani, M.; Imai, H.; Ando, K.; Nakashima, K.; Hirota, T.; Inomata, N.; Kai, T.; Kameno, S.; Kijima, M.; Kobayashi, H.; and 18 coauthors. Statistical Properties of Stellar H2O Masers --- Results of Three-Year Single-Dish Observations with the VERA Iriki Telescope. 2008, PASJ, 60, 1077S

Richards, A. M. S.; Elitzur, M.; Yates, J. A. **Observational evidence for the shrinking of bright maser spots.** 2011, A&A, 525A, 56R

Richards, A. M. S.; Etoka, S.; Gray, M. D.; Lekht, E. E.; Mendoza-Torres, J. E.; Murakawa, K.; Rudnitskij, G.; Yates, J. A**. Evolved star water maser cloud size determined by star size**. 2012, A&A, 546A ,16R

2019IAUS..343..493R
2019/12

Circumstellar molecular maser emission of AGB and post-AGB stars

- Rudnitskij, Georgij;
- Ashimbaeva, Nuriya;
- Colom, Pierre

Variability of the H2O maser associated with Mira variable RS Virginis
Lekht E.E., Mendoza-Torres J.E., Rudnitskij G.M., Tolmachev A.M., 2001, Astronomy and Astrophysics, V. 376, P. 928-940
A 7 B 4
A+1 B+1 P30
Citations A 8 B 5 citas 13

1. **Conference Information: Workshop on Mass-Losing Pulsating Stars and Their Circumstellar Matter**
Rudnitskij GM, Pashchenko MI, Esipov VF, et al.
MAY 13-16, 2002 SENDAI, JAPAN
Optical and microwave spectroscopy of long-period variable stars
MASS-LOSING PULSATING STARS AND THEIR CIRCUMSTELLAR MATTER: OBSERVATIONS AND THEORY ASTROPHYSICS AND SPACE SCIENCE LIBRARY
Times Cited: 0

2. **Millimetre science with the upgraded Australia telescope**
Wong T, Melatos A
PUBLICATIONS OF THE ASTRONOMICAL SOCIETY OF AUSTRALIA 19 (4): 475-485 2002
Times Cited: 3

3. **Molecular masers in variable stars**
Rudnitskij GM
PUBLICATIONS OF THE ASTRONOMICAL SOCIETY OF AUSTRALIA 19 (4): 499-504 2002
Times Cited: 1

2. **Observations of late-type variable stars in the water vapor radio line. The long-period variable R cassiopeia**
Pashchenko MI, Rudnitskii GM
ASTRONOMY REPORTS 48 (5): 380-392 MAY 2004
Times Cited: 1

4. **Variability of the H2O maser associated with the M-supergiant S**

Persei
Lekht EE, Rudnitskij GM, Mendoza-Torres JE, et al.
ASTRONOMY & ASTROPHYSICS 437 (1): 127-U69 JUL 2005
Times Cited: 0

5**. Water vapour masers in long-period variable stars - I. RX bootis and SV pegasi**
Winnberg A, Engels D, Brand J, et al.
ASTRONOMY & ASTROPHYSICS 831-U62 Published: MAY 2008
Times Cited: 0

Lekht, E. E.; Mendoza-Torres, J. E.; Rudnitskij, G. M.; Tolmachev, A. M. **Variability of the H2O maser associated with the Mira variable RS Virginis.** 2001, A&A, 376, 928L

Diamond, P. J. **Stellar masers: a review**. 2002, IAUS, 206, 253D

Murakawa, K.; Yates, J. A.; Richards, A. M. S.; Cohen, R. J.; van Langevelde, H. J**. A study of OH and H2O masers in the circumstellar envelopes around Miras**. 2002, evn, conf, 219M

Bains, I.; Cohen, R. J.; Louridas, A.; Richards, A. M. S.; Rosa-González, D.; Yates, J. A. **Sub-au imaging of water vapour clouds around. four asymptotic giant branch stars**. 2003, MNRAS, 342, 8B

Rudnitskii, G. M.; Pashchenko, M. I. **Long-Term Monitoring of the Long-Period . Variable Y Cassiopeiae in the 1.35-cm Water-Vapor Line.** 2005, AstL, 31, 760R

Shintani, M.; Imai, H.; Ando, K.; Nakashima, K.; Hirota, T.; Inomata, N.; Kai, T.; Kameno, S.; Kijima, M.; Kobayashi, H.; and 18 coauthors. **Statistical Properties of Stellar H2O Masers --- Results of Three-Year Single-Dish Observations with the VERA Iriki Telescope**, 2008, PASJ, 60, 1077S

Richards, A. M. S.; Elitzur, M.; Yates, J. A. **Observational evidence for the shrinking of bright maser spots**. 2011, A&A, 525A, 56R

Richards, A. M. S.; Etoka, S.; Gray, M. D.; Lekht, E. E.; Mendoza-Torres, J. E.; Murakawa, K.; Rudnitskij, G.; Yates, J. A. **Evolved star water maser cloud size determined by star size.** 2012, A&A, 546A, 16R

2017JKAS...50..157S
2017/12

Time Variations of the Radial Velocity of H2O Masers in the Semi-Regular Variable R Crt

- Sudou, Hiroshi;
- Shiga, Motoki;
- Omodaka, Toshihiro

 2019IAUS..343..493R
2019/12

Circumstellar molecular maser emission of AGB and post-AGB stars

- Rudnitskij, Georgij;
- Ashimbaeva, Nuriya;
- Colom, Pierre
- *and 3 more*

 10
2022arXiv221004926J
2022/10

Sciences with Thai National Radio Telescope

- Jaroenjittichai, Phrudth;
- Sugiyama, Koichiro;
- Kramer, Busaba H

A study of the kinematics of the H2O maser sources S269 and W75S from long-term monitoring

Lekht E.E., Silant'ev N.A., Mendoza-Torres J.E., Pashchenko M.I., Krasnov V.V. Astronomy and Astrophysics, 2001, V. 377, P. 999-1006

A 9 B 1

A+2 B+0 P33

Citations A 11 B 1

1**. An analysis of the line shape for H2O maser emission peaks in star-forming regions**

Lekht EE, Silant'ev NA, Mendoza-Torres JE, et al.

ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 28 (2): 89-99 FEB 2002

2**. A possible formation mechanism of the asymmetry in the H2O maser emission line**

Silant'ev NA, Lekht EE, Mendosa-Torres JE, et al.

ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 28 (4): 217-222 APR 2002

Times Cited: 0

3**. Time-dependent thermal X-ray afterglows**
Kosenko, D.; Sorokina, E.; Blinnikov, S.; Lundqvist, P.; Postnov, K.
34th COSPAR Scientific Assembly, The Second World Space Congress, held 10-19 October, 2002 in Houston, TX, USA., meeting abstract

4. **X-ray emission lines in the early afterglows of gamma-ray bursts**
Kosenko DI, Blinnikov SI, Postnov KA, et al.
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 29 (4): 205-213 APR 2003
Times Cited: 6

5**. A near-infrared study of the star-forming region S269**
Jiang ZB, Yao YQ, Yang J, et al.
ASTROPHYSICAL JOURNAL 596 (2): 1064-1079 Part 1 OCT 20 2003
Times Cited: 3

6**. Time-dependent thermal X-ray afterglows from GRBS**
Kosenko DI, Blinnikov SI, Postnov KA, et al.
ADVANCES IN SPACE RESEARCH 34 (12): 2705-2710 2004
Times Cited: 0

Wong, T.; Melatos, **A. Millimetre Science with the Upgraded Australia Telescope**. 2002, PASA, 19, 475W

Rudnitskij, G. M. **Molecular Masers in Variable Stars**. 2002, PASA, 19, 499R

Pashchenko, M. I.; Rudnitskii, G. M**. Observations of Late-Type Variable Stars in . theWater Vapor Radio Line. The Long-Period Variable R Cassiopeia**. 2004, ARep, 48, 380P

Lekht, E. E.; Rudnitskij, G. M.; Mendoza-Torres, J. E.;Tolmachev, A. M. **Variability of the H2O maser associated with the M-supergiant S Persei** .2005, A&A, 437, 127L

Winnberg, A.; Engels, D.; Brand, J.; Baldacci, L.; Walmsley, C. M. **Water vapour masers in long-period variable stars**. I. RX Bootis and SV Pegasi. 2008, A&A, 482, 831W

Shintani, M.; Imai, H.; Ando, K.; Nakashima, K.; Hirota, T.; Inomata, N.; Kai, T.; Kameno, S.; Kijima, M.; Kobayashi, H.; and 18 coauthors. **Statistical Properties of Stellar H2O Masers --- Results of Three-Year Single-Dish Observations with the VERA Iriki Telescope**. 2008,PASJ, 60, 1077S

Dong, J.**The Principle and Application of Maser Navigation**. 2009, arXiv0901, 0068D

 2012NewA...17..553M
2012/08

Analysis of H_2O masers in Sharpless 269 using VERA archival data—Effect of maser structures on astrometric accuracy

- Miyoshi, Makoto;
- Asaki, Yoshiharu;
- Wada, Keiichi
- *and 1 more*

 9
2019A&A...625A..70Q
2019/05

Resolving the distance controversy for Sharpless 269. A possible kink in the outer arm

- Quiroga-Nuñez, L. H.;
- Immer, K.;
- van Langevelde, H. J.

Cyclic activity of the water-vapor maser in S128
Lekht, E.E., Mendoza-Torres J.E. and Berulis I.I., 2002, Astron. Rep. 46, pp.63-72
A 3 B 2
A +0 B +1 p35

Citations A 3 B 3 citas 6

1**. An analysis of the line shape for H2O maser emission peaks in star-forming regions**
Lekht EE, Silant'ev NA, Mendoza-Torres JE, et al.
ASTRONOMY LETTERS-A JOURNAL OF ASTRONOMY AND SPACE ASTROPHYSICS 28
(2): 89-99 FEB 2002

2. **Long-term study of water masers associated with Young Stellar Objects - II. Analysis**
Brand J, Cesaroni R, Comoretto G, et al.
ASTRONOMY & ASTROPHYSICS 407 (2): 573-587 AUG 2003

3. **Merlin and puschino observations of H2O masers in outer galactic SFR S128N**
Richards AMS, Cohen RJ, Crocker M, et al.
ASTROPHYSICS AND SPACE SCIENCE 295 (1-2): 19-25 2005

4. **A study of the asymmetry in the H2O maser line at lambda=1.35 cm on the base of the hyperfine structure.**
Lekht EE, Silant'ev NA, Rudnitskij GM, et al.
ASTRONOMY & ASTROPHYSICS 475-480 Published: DEC 2008

Beaming in on some stimulating issues in stellar evolution
A Richards - 8th European VLBI Network Symposium, 2007 - pos.sissa.it

This review discusses some recent maser observations and their interpretation, with the emphasis on physical processes in star formation and mass loss from evolved stars. I draw attention to issues where high-resolution observations have led to new, surprising or …

Observations of OH and H_2O Maser Emission in the Star-Forming Region S128
NT Ashimbaeva, P Colom, EE Lekht, MI Pashchenko… - Astronomy Reports, 2018 - Springer

Results of monitoring hydroxyl and water masers in the star-forming region S128 are presented. A large number of emission features in the 1665 MHz OH line have been detected in both circular polarizations. In spite of the strong variability of the flux density in …

An Analysis of the Line Shape for H2O Maser Emission Peaks in Star-Forming Regions
Lekht, E. E.; Silant'ev, N. A.; Mendoza-Torres, J. E.; Tolmachev, A. M., 2002, Astronomy Letters, Volume 28, pp.89-99
A 2 B 1 Citast2
A+0 B+1 P36
Citations A 2 B 2 Citast4

A survey of large molecules of biological interest toward selected high-mass star-forming regions
Remijan A, Shiao YS, Friedel DN, et al.
ASTROPHYSICAL JOURNAL 617 (1): 384-398 Part 1 DEC 10 2004
Times Cited: 16

The Λ0 = 1.35 cm H2O maser line: The hyperfine structure and profile asymmetry.
Varshalovich, D. A.; Ivanchik, A. V.; Babkovskaya, N. S. Astronomy Letters, vol. 32, Issue 1, p.29-38, 2006
Times Cited: 2

H_2O maser flares in the source W75 N
VV Krasnov, EE Lekht, GM Rudnitskii, MI Pashchenko… - Astronomy Letters, 2015 - Springer

We present the results of our study of the H 2 O maser emission in the intricate complex of active star formationW75 N. Our observations have been carried out at the 22-m radio telescope of the Pushchino Radio AstronomyObservatory. A possible identification of its …

Artículos relacionados Las 6 versiones
2019ARep...63..814C
2019/10

Observations of Maser Emission in the Star-Forming Region G43.8-0.1. II. H2O Maser Emission at 1.35 cm

- Colom, P.;
- Ashimbaeva, N. T.;
- Lekht, E. E.

VLA observations of H2O maser emission associated with SVS 13 and other sources in NGC

L. F. Rodríguez, G. Anglada, J. M. Torrelles, J.E Mendoza-Torres, A. D. Haschick and P. T. P. Ho, 1333, 2002, Astron. Astrophys. 389, pp. 572-576
A 13 B 3 Citast16
A+4 B+1 P37

Citations A 17 B 4 Citast21

Furuya RS, Kitamura Y, Wootten A, et al.
Water maser survey toward low-mass young stellar objects in the northern sky with the Nobeyama 45 meter telescope and the very large array
ASTROPHYSICAL JOURNAL SUPPLEMENT SERIES 144 (1): 71-134 JAN 2003
Times Cited: 15

Gallimore JF, Cool RJ, Thornley MD, et al.
Expansion of the R4 H2O maser arc near Cepheus A HW2
ASTROPHYSICAL JOURNAL 586 (1): 306-318 Part 1 MAR 20 2003
Times Cited: 6

Anglada GVLA observations of disks and jets in young close binaries IAU Colloquium 191 on the Environment and Evolution of Double and Multiple Stars, FEB 03-07, 2003 Merida, MEXICO
ENVIRONMENT AND EVOLUTION OF DOUBLE AND MULTIPLE STARS Book Series: REVISTA MEXICANA DE ASTRONOMIA Y ASTROFISICA, SERIE DE CONFERENCIAS 2004
Times Cited: 0

Anglada G, Rodriguez LF, Osorio M, et al.
A single circumstellar disk in the SVS 13 close binary system
ASTROPHYSICAL JOURNAL 605 (2): L137-L140 Part 2 APR 20 2004
Times Cited: 1

Gómez, José F.; de Gregorio-Monsalvo, Itziar; Suárez, Olga; Kuiper, Thomas B. H.
A Sensitive Survey for Water Maser Emission Toward Bok Globules Using the Robledo 70 m Antenna
The Astronomical Journal, 2006.
Times Cited: 6

Park, Geumsook; Choi, Minho
Water Masers from the Protostellar Disk and Outflow in the NGC 1333 IRAS 4 Region
Journal of the Korean Astronomical Society, 2007.
Times Cited: 0

Park, Geumsook; Choi, Minho
Observations of Water Masers in the NGC 1333 IRAS 4 Region
The Astrophysical Journal, 2007.
Times Cited: 4

8. Hirota, Tomoya; Bushimata, Takeshi; Choi, Yoon Kyung; Astrometry of H2O **Masers in Nearby Star-Forming Regions with VERA II SVS13 in NGC1333**
Publications of the Astronomical Society of Japan, 2008
Times Cited: 1

9. Marvel, Kevin B.; Wilking, Bruce A.; Claussen, Mark J.; Wootten, Alwyn
Time-Resolved AU-Scale Jets Traced by Masers in the IRAS 4A/B Regions of NGC 1333The Astrophysical Journal, 2008.
Times Cited: 0

10. Carrasco-González, Carlos; Anglada, Guillem; Rodríguez, Luis F.; Torrelles, José M.; Osorio, Mayra
Proper Motions of Thermal Radio Sources Near HH 7-11 in the NGC 1333 Star-Forming Region
The Astronomical Journal (2008)
Times Cited: 0

Webster, Z. T.; Welch, W. J. **BIMA Observations of CO and Dust in NGC 1333 IRAS 7**. 2005, prpl.conf.8543W

Bally, J.; Walawender, J.; Johnstone, D.; Kirk, H.; Goodman, A. **The Perseus Cloud**. 2008, hsf1, book, 308B

Desmurs, J.; Codella, C.; Santiago-García, J.; Tafalla, M.; Bachiller, R. **The extremely collimated bipolar H{2}O jet from the NGC 1333-IRAS 4B protostar**. 2009, A&A, 498, 753D

Alves, F. O.; Acosta-Pulido, J. A.; Girart, J. M.; Franco, G. A. P.; López, R**. Infrared and Optical Polarimetry around the Low-mass Star-forming Region NGC 1333 IRAS 4A**. 2011, AJ, 142, 33A

Choi, M.; Lee, J. **Radio Imaging of the NGC 1333 IRAS 4B Region.** 2011, JKAS, 44, 201C

Herczeg, G. J.; Karska, A.; Bruderer, S.; Kristensen, L. E.; van Dishoeck, E. F.; Jørgensen, J. K.; Visser, R.; Wampfler, S. F.; Bergin, E. A.; Yıldız, U. A.; and 1 coauthor. **Water in star-forming regions with Herschel: highly excited molecular emission from the NGC 1333 IRAS 4B outflow**. 2012, A&A, 540A, 84H

 2016A&A...595A..51K
2016/10

Evolutionary status of dense cores in the NGC 1333 IRAS 4 star-forming region

- Koumpia, E.;
- van der Tak, F. F. S.;
- Kwon, W.
- *and 3 more*

 18
2017A&A...597A..64D
2017/01

Feedback of atomic jets from embedded protostars in NGC 1333

- Dionatos, Odysseas;
- Güdel, Manuel

 19
2022ApJ...930...91D
2022/05

The Physical Properties of the SVS 13 Protobinary System: Two Circumstellar Disks and a Spiraling Circumbinary Disk in the Making

- Diaz-Rodriguez, Ana K.;
- Anglada, Guillem;
- Blázquez-Calero, Guillermo
- *and 13 more*

 20
2022AstL...48..345N

2022/06

Collisional Pumping of H{}2O and CH{}3OH Masers in C-Type Shock Waves

- Nesterenok, A. V.

□ 21
2023A&A...674A.202S
2023/06

The Effelsberg survey of FU Orionis and EX Lupi objects. II. H2O maser observations

- Szabó, Zs. M.;
- Gong, Y.;
- Yang, W.

Explosive events in the solar atmosphere seen in extreme-ultraviolet emission lines
Mendoza-Torres, J.E., Torres-Papaqui J.P. and Wilhelm K.. Astronomy and Astrophysics, 2005, Vol. 431, pp. 339 – 344
Citations A 5 B 2 citas 7

Astrophysics in 2005
Trimble, Virginia; Aschwanden, Markus J.; Hansen, Carl J.
The Publications of the Astronomical Society of the Pacific, Volume 118, Issue 845, pp. 947-1047, 2006

Doppler Shift Correlations in the Solar Transition Region
Doschek, G. A.
The Astrophysical Journal, Volume 649, Issue 1, pp. 515-528, 2006

Observations of the Sun at Vacuum-Ultraviolet Wavelengths from Space. Part II: Results and Interpretations
Wilhelm, Klaus; Marsch, Eckart; Dwivedi, Bhola N.; Feldman, Uri
Space Science Reviews, Volume 133, Issue 1-4, pp. 103-179, 2007

Solar transition region and quiet corona
K Wilhelm - Solar System, 2009 - Springer

The transition region (TR) is the interface between the solar chromosphere and the low corona. The electron temperature, Te, increases in this region from about 2.5 x 104 K to 6 x 105 K. Despite the detailed observations obtained over the last 40 years, the physical …

Study of the structures of the explosive events in the UV
RT Niembro-Hernandez… - Proceedings of the …, 2009 - cambridge.org

We analyze Si iv 139.37 nm emission line during solar Explosive Events (EE) near the center of the solar disk with the aim to study the structure of the sources of EEs observed at the VUV. The observations were made by SUMER, on board SoHO, with a raster regime of …

Quiet Sun explosive events: Jets, splashes, and eruptions

DE Innes, L Teriaca - Solar Physics, 2013 - Springer

Explosive events appear as broad non-Gaussian wings in the line profiles of small transition-region phenomena. Images from the Solar Dynamics Observatory (SDO) give a first view of the plasma dynamics at the sites of explosive events seen simultaneously in O vi spectra of …

Post-reconnection Processes—Shocks, Jets, and Microflares

M Ryutova - Physics of Magnetic Flux Tubes, 2015 - Springer

In the previous chapter, we began to study the reconnection of magnetic flux tubes under the photospheric conditions where magnetic energy is less than the gas-kinetic energy of surrounding plasma ($\beta \geq 1$ $\beta \geq 1$). We saw that unlike a low β β reconnection that liberates …

Variability of the H2O maser associated with the M-supergiant S Persei

Lekht E.E., Mendoza-Torres J.E., Rudnitskij G.M., Tolmachev A.M.. Astronomy and Astrophysics, 2005, Vol. 437, P. 127-133

A 9 B 2

A+2 B+0 P42

Citations A 11 B 2 citas13

MERLIN and Pushchino observations of H2O masers in outer Galactic SFR S128N

Richards A.M.S., Cohen R.J., Crocker M., Lekht E.E., Mendoza E., Samodurov V.A. Astrophysics and Space Science 295: 19-25, 2004. Springer 2005

Monitoring of Spectral Variations of Mira-Type and Semiregular Variable Stars

GM Rudnitskij - Odessa Astronomical Publications, 2005 - oap.onu.edu.ua

Анотація The results of monitoring of a sample of late-type variable stars (Mira Ceti-type and semiregulars) are reported. Since 1980 a sample of 60 stars has been observed in the maser line of the H 2 O molecule at a wavelength of 1.35 cm. These observations are …

Variability in red supergiant stars: pulsations, long secondary periods and convection noise

Kiss, L. L.; Szabó, Gy. M.; Bedding, T. R.

Monthly Notices of the Royal Astronomical Society, Volume 372, Issue 4, pp. 1721-1734, 2006

•

result

Document Turbulent, steamy red supergiant winds

Authors of Document Richards, A.M.S., Bains, I., Bartkiewicz, A., (...), Vlemmings, W., Yates, J.A.

Year the Document was Publish 2007

Source of the Document Proceedings of the International Astronomical Union

result

Document Statistical properties of stellar H2O masers - results of three-year single-dish observations with the VERA Iriki telescope

Authors of Document Shintani, M., Imai, H., Ando, K., (...), Ueda, Y., Yamashita, K.

Year the Document was Publish 2008

Source of the Document Publications of the Astronomical Society of Japan

Number of Documents that reference this Document 17

Show record link row

•

result

Document Radio spectroscopy of late-type variable stars

Authors of Document Rudnitskij, G.M.

Year the Document was Publish 2008

Source of the Document Journal of Physical Studies

Number of Documents that reference this Document 0

Show record link row

View at Publisher

Water vapour masers in long-period variable stars.

I. RX Bootis and SV Pegasi

Winnberg, A.; Engels, D.; Brand, J.; Baldacci, L.; Walmsley, C. M.

Astronomy and Astrophysics, Volume 482, Issue 3, 2008, pp.831-848

•

result 4

Document Observational evidence for the shrinking of bright maser spots

Authors of Document Richards, A.M.S., Elitzur, M., Yates, J.A.

Year the Document was Publish 2010

Source of the Document Astronomy and Astrophysics

Number of Documents that reference this Document 2

Show record link row

View at Publisher

•

result 5

Document Outburst OH maser activity in the envelopes of S Persei and VXSagittarii

Authors of Document Szymczak, M., Wolak, P., Gérard, E., Richards, A.M.S.
Year the Document was Publish 2010
Source of the Document Astronomy and Astrophysics
Number of Documents that reference this Document 2

Show record link row
View at Publisher
•

result 3

Document Observational evidence for the shrinking of bright maser spots

Authors of Document Richards, A.M.S., Elitzur, M., Yates, J.A.
Year the Document was Publish 2011
Source of the Document Astronomy and Astrophysics
Number of Documents that reference this Document 0
Show record link row
View at Publisher

•

result

Document Evolved star water maser cloud size determined by star size

Authors of Document Richards, A.M.S., Etoka, S., Gray, M.D., (...), Rudnitskij, G., Yates, J.A.
Year the Document was Publish 2012
Source of the Document Astronomy and Astrophysics

Statistical studies based on simultaneous sio and H2O maser surveys toward evolved stars

Authors of Document Kim, J., Cho, S.-H., Kim, S.J.
Year the Document was Publish 2014
Source of the Document Astronomical Journal

2016MNRAS.456..374G
2016/02

The physics of water masers observable with ALMA and SOFIA: model predictions for evolved stars

- Gray, M. D.;
- Baudry, A.;
- Richards, A. M. S

Time Variations of the Radial Velocity of H2O Masers in the Semi-regular Variable R Crt, H Sudou, M Shiga, T Omodaka, C Nakai… - arXiv preprint arXiv …, 2017 - arxiv.org
H $ _2 $ O maser emission at 22 GHz in the circumstellar envelope is one of the good tracers of detailed physics and kinematics in the mass loss process of asymptotic giant branch stars. Long-term monitoring of an H $ _2 $ O maser spectrum with high time …

2019MNRAS.488.1427K
2019/09

Time variations of H2O and SiO masers in the proto-Planetary Nebula OH 231.8+4.2

- Kim, Jaeheon;
  - Cho, S. -H.;
  - Bujarrabal, V.

Are Halo CME's special events?
Lara A., Gopalswamy, N., Xie H., Mendoza-Torres E., P\\'erez-Enriquez R., Michalek G Journal of Geophysical Research, 2006, Journal of Geophysical Research, 111, 107
A 25 B 4
A+8 B+3 P45

Citations A 33 B 7 CITAS 40

Astrophysics in 2006
Trimble V, Aschwanden MJ, Hansen CJ
SPACE SCIENCE REVIEWS SEP 2007
Times Cited: 1

The magnetic topology of coronal mass ejection sources
Ugarte-Urra I, Warren HP, Winebarger AR
ASTROPHYSICAL JOURNAL JUN 20 2007
Times Cited: 11

What determines the intensity of solar flare/CME events?
Su YN, Van Ballegooijen A, McCaughey J, et al.
ASTROPHYSICAL JOURNAL AUG 20 2007
Times Cited: 4

Investigation of CME dynamics in the LASCO field of view
Shanmugaraju, A.; Moon, Y.-J.; Cho, K.-S.; Gopalswamy, N.; Umapathy, S.
Astronomy and Astrophysics, Volume 484, Issue 2, 2008, pp.511-516

The Heliospheric Imagers Onboard the STEREO Mission

Eyles, C. J.; Harrison, R. A.; Davis, C. J.; Waltham, N. R.; Shaughnessy, B. M.; Mapson-Menard, H. C. A.; Bewsher, D.; Crothers, S. R.; Davies, J. A.; Simnett, G. M.; 2008SoPh..tmp..193E

Coronal mass ejections: models and their observational basis
PF Chen - Living Reviews in Solar Physics, 2011 - Springer

Coronal mass ejections (CMEs) are the largest-scale eruptive phenomenon in the solar system, expanding from active region-sized nonpotential magnetic structure to a much larger size. The bulk of plasma with a mass of~ 10 11, 10 13 kg is hauled up all the way out to the …

Citado por 385 Artículos relacionados Las 11 versiones

Statistical study of coronal mass ejection source locations: Understanding CMEs viewed in coronagraphs
Y Wang, C Chen, B Gui, C Shen, P Ye… - Journal of Geophysical …, 2011 - Wiley Online Library

How to properly understand coronal mass ejections (CMEs) viewed in white light coronagraphs is crucial to many relative researches in solar and space physics. The issue is now particularly addressed in this paper through studying the source locations of all the …

Magnetohydrodynamic modeling for a formation process of coronal mass ejections: Interaction between an ejecting flux rope and an ambient field
D Shiota, K Kusano, T Miyoshi… - The Astrophysical …, 2010 - iopscience.iop.org

We performed a magnetohydrodynamic simulation of a formation process of coronal mass ejections (CMEs), focusing on the interaction (reconnection) between an ejecting flux rope and its ambient field. We examined three cases with different ambient fields: one had no

Full halo coronal mass ejections: Do we need to correct the projection effect in terms of velocity?
C Shen, Y Wang, Z Pan, M Zhang… - Journal of Geophysical …, 2013 - Wiley Online Library

The projection effect is one of the biggest obstacles in learning the real properties of coronal mass ejections (CMEs) and forecasting their geoeffectiveness. To evaluate the projection effect, 86 full halo CMEs (FHCMEs) listed in the Coordinated Data Analysis Workshop CME …

Global coronal waves
PF Chen - Low-Frequency Waves in Space Plasmas, Monograph …, 2016 - books.google.com

After the launch of the Solar and Heliospheric Observatory (SOHO) on 2 December 1995, the onboard Extreme Ultraviolet (EUV) Imaging Telescope [EIT; Delaboudinière et al., 1995] was routinely observing the solar corona with a cadence of 12–15 min at four EUV …

Are halo-like solar coronal mass ejections merely a matter of geometric projection effects?, RY Kwon, J Zhang, A Vourlidas - The Astrophysical Journal …, 2015 - iopscience.iop.org
We investigated the physical nature of halo coronal mass ejections (CMEs) based on the stereoscopic observations from the two STEREO spacecraft, Ahead and Behind (hereafter A and B), and the SOHO spacecraft. Sixty-two halo CMEs occurred as observed by SOHO …

The source region of coronal mass ejections
A Lara - The Astrophysical Journal, 2008 - iopscience.iop.org

We use the large database of coronal mass ejections (CMEs) observed by SOHO LASCO during solar cycle 23 to statistically obtain information about the source regions of CMEs. By determining the functional form of the position angle (PA) distribution, we are able to …

Investigating the wave nature of the outer envelope of halo coronal mass ejections
RY Kwon, A Vourlidas - The Astrophysical Journal, 2017 - iopscience.iop.org

We investigate the nature of the outer envelope of halo coronal mass ejections (H-CMEs) using multi-viewpoint observations from the Solar Terrestrial Relations Observatory-A,-B, and SOlar and Heliospheric Observatory coronagraphs. The 3D structure and kinematics of …

Why are halo coronal mass ejections faster?
QM Zhang, Y Guo, PF Chen, MD Ding… - Research in Astronomy …, 2010 - iopscience.iop.org

Halo coronal mass ejections (CMEs) have been to be significantly faster than normal CMEs, which is a long-standing puzzle. In order to solve the puzzle, we first investigate the observed properties of 31 limb CMEs that clearly display loop-shaped frontal loops. The …

Comparison between 2D and 3D parameters of 306 front-side halo CMEs from 2009 to 2013, S Jang, YJ Moon, RS Kim, H Lee… - The Astrophysical …, 2016 - iopscience.iop.org
We investigate 306 LASCO front-side halo (partial and full) CMEs from 2009 to 2013, which are well-observed by both the Solar and Heliospheric Observatory (SOHO) and the Solar TErrestrial RElations Observatory (STEREO). These CMEs have two-dimensional (2D) …

Searching for solar clouds in interplanetary space
R Harrison, C Davis, C Eyles, JP Halain… - Space Research Today, 2007 - Elsevier

C oronal Mass Ejections (CMEs) are among the most energetic and dramatic transient events in the solar system, releasing some 1012-1013 kg of matter from the Sun at velocities of typically 300-400 km s-1 in discrete eruptions. Such eruptions are a major component of …

Testing the asymmetric cone model for halo CMEs using STEREO/SECCHI coronagraphic observations
J Nicewicz, G Michalek - Advances in Space Research, 2014 - Elsevier

Abstract Space weather is significantly controlled by halo coronal mass ejections (HCMEs) originating close to the central meridian and directing toward the Earth. Unfortunately, coronagraphic observations (especially for HCMEs) are subject to a projection effect which …

Coronal Mass Ejections from the Same Active Region Cluster: Two Different Perspectives

H Cremades, CH Mandrini, B Schmieder… - Solar physics, 2015 - Springer

The cluster formed by active regions (ARs) NOAA 11121 and 11123, approximately located on the solar central meridian on 11 November 2010, is of great scientific interest. This complex was the site of violent flux emergence and the source of a series of Earth-directed …

Solar Energetic Particle Event Onsets: Far Backside Solar Sources And The East–West Hemispheric Asymmetry

SW Kahler - The Astrophysical Journal, 2016 - iopscience.iop.org

Prompt onsets and short rise times to peak intensities Ip have been noted in a few solar energetic (E> 10 MeV) particle (SEP) events from far behind (≥ 25) the west limb. We discuss 15 archival and recent examples of these prompt events, giving their source …

Investigation of CME dynamics in the LASCO field of view

A Shanmugaraju, YJ Moon, KS Cho… - Astronomy & …, 2008 - aanda.org

Context. The speed-distance profile of CMEs is important for understanding the propagation of CMEs. Aims. Our main aim is to study the initial speed of CMEs in the LASCO field of view and its role in subsequent CME propagation using the acceleration-speed profile. The …

Commission 10: solar activity

JA Klimchuk, L van Driel-Gesztelyi… - Proceedings of the …, 2008 - cambridge.org

Commission 10 deals with solar activity in all of its forms, ranging from the smallest nanoflares to the largest coronal mass ejections. This report reviews scientific progress over the roughly two-year period ending in the middle of 2008. This has been an exciting time in …

CME Geometry and the Production of Shocks and SEP Events

S Kahler, N Gopalswamy - PROCEEDINGS OF THE 31st ICRC, Ł … - galprop.stanford.edu

Fast (VCME≥ 900 km/s) CMEs are usually associated with coronal shocks which are manifested by radio type II bursts in the metric through kilometric wavelength range. This association is expected when VCME exceeds the characteristic Alfven speed in the corona …

Nowcasting of Solar Energetic Particle Events using near real-time Coronal Mass Ejection characteristics in the framework of the FORSPEF tool

A Papaioannou, A Anastasiadis… - Journal of Space …, 2018 - swsc-journal.org

In this work the derived occurrence probability of solar energetic particle (SEP) events (ie proton events measured at Earth's position) and their peak fluxes and total fluences depending on coronal mass

Solar Activity: Triennial Report of IAU Commission 10 (2006-2009)

JA Klimchuk, L van Driel-Gesztelyi, CJ Schrijver… - arXiv preprint arXiv …, 2008 - arxiv.org

Commission 10 deals with solar activity in all of its forms, ranging from the smallest nanoflares to the largest coronal mass ejections. This report reviews scientific progress over the roughly two-year period ending in the middle of 2008. This has been an exciting time in …

Pursuing Forecasts of the Behavior and Arrival of Coronal Mass Ejections through Modeling and Observations,

H Cremades - Proceedings of the International Astronomical Union, 2017 - cambridge.org
Sophisticated instrumentation dedicated to studying and monitoring our Sun's activity has proliferated in the past few decades, together with the increasing demand of specialized space weather forecasts that address the needs of commercial and government systems. As …

A long-duration active region: Evolution and quadrature observations of ejective events, H Cremades, CH Mandrini, MCL Fuentes… - Proceedings of the …, 2016 - cambridge.org
Unknown aspects of the initiation, evolution, and associated phenomena of coronal mass ejections (CMEs), together with their capability of perturbing the fragile technological equilibrium on which nowadays society depends, turn them a compelling subject of study …

Forecasting the Structure and Orientation of Earthbound Coronal Mass Ejections
EKJ Kilpua, N Lugaz, L Mays, M Temmer - Space Weather - Wiley Online Library

Abstract Coronal Mass Ejections (CMEs) are the key drivers of strong to extreme space weather storms at the Earth that can have drastic consequences for technological systems in space and on ground. The ability of a CME to drive geomagnetic disturbances depends …

Solar-Terrestrial Interactions
LR Cander - Ionospheric Space Weather, 2019 - Springer

The science underpinning the study of space weather is discussed, starting from dynamic processes on the Sun, in the interplanetary medium, and in the Earth's magnetosphere, ionosphere, and atmosphere. The focus is on the dominant features of the plasma medium …

Numerical simulations of ICME–ICME interactions
T Niembro, A Lara, RF González… - Journal of Space Weather …, 2019 - swsc-journal.org

We present hydrodynamical simulations of the interaction of Coronal Mass Ejections (CME) in the Interplanetary Medium (IPM). In these events, two consecutive CMEs are launched from the Sun in similar directions within an interval of time of a few hours. In our numerical …

2019AstL...45..164V
2019/03

On the Origin of Solar Halo Coronal Mass Ejections

- Verma, V. K.;
- Mittal, Nishant

□ 17
2019SpWea..17..498K
2019/04

Forecasting the Structure and Orientation of Earthbound Coronal Mass Ejections

- Kilpua, E. K. J.;
- Lugaz, N.;
- Mays, M. L.
- *and 1 more*

□ 18
2019SSRv..215...39L
2019/08

Coronal Mass Ejections over Solar Cycles 23 and 24

- Lamy, P. L.;
- Floyd, O.;
- Boclet, B.
- *and 3 more*

□ 19
2019JPhCS1332a2004G
2019/11

On the Shock Source of Sustained Gamma-Ray Emission from the Sun

- Gopalswamy, N.;
- Mäkelä, P.;
- Yashiro, S.
- *and 3 more*

□ 20
2019ApJ...886L..37K
2019/12

Frequency of Coronal Mass Ejection Impacts with Early Terrestrial Planets and Exoplanets around Active Solar-like Stars

- Kay, Christina;
- Airapetian, Vladimir S.;
- Lüftinger, Theresa

- *and 1 more*

□ 21
2019JSWSC...9A...4N
2019/12

Numerical simulations of ICME-ICME interactions

- Niembro, Tatiana;
- Lara, Alejandro;
- González, Ricardo Francisco
- *and 1 more*

□ 22
2020A&A...635A.112L
2020/03

Space, time and velocity association of successive coronal mass ejections

- Lara, Alejandro;
- Gopalswamy, Nat;
- Niembro, Tatiana
- *and 2 more*

□ 23
2020AdSpR..65.1641I
2020/03

Analysis of a long-duration AR throughout five solar rotations: Magnetic properties and ejective events

- Iglesias, Francisco A.;
- Cremades, Hebe;
- Merenda, Luciano A.
- *and 4 more*

□ 24
2021SoPh..296...75S
2021/04

Occurrence Rate of Radio-Loud and Halo CMEs in Solar Cycle 25: Prediction Using their Correlation with the Sunspot Number

- Shanmugaraju, A.;
- Pappa Kalaivani, P.;
- Moon, Y. -J.
- *and 1 more*

 25
2021SoPh..296..104A
2021/06

Detection of Coronal Mass Ejections Using Unsupervised Deep Clustering

- Alshehhi, Rasha;
- Marpu, Prashanth R.

2022SoPh..297...57P
2022/05

Kinematic Study of Radio-Loud CMEs Associated with Solar Flares and DH Type-II Radio Emissions During Solar Cycles 23 and 24

- Pappa Kalaivani, P.;
- Prakash, O.;
- Shanmugaraju, A.

Silant'ev N.A., Lekht E.E., Mendoza-Torres J.E., Rudnitskij G.M. Influence of turbulence on the shape of a spectral line, Astron. Astrophys., 2006, 453, 989
A 2 B 1
A+2 B+2 P52
Citations A 4 B 3

Masers and star formation
Fish, Vincent L.
Astrophysical Masers and their Environments, Proceedings of the International Astronomical Union, IAU Symposium, Volume 242, p. 71-80, 2007

2007IAUS..242...32S
2007/03

Influence of turbulence on the shape of a spectral line: the analytical approach

- Silant'ev, N. A.;
- Lekht, E. E.;
- Mendoza-Torres, J. E.

Influence of temperature fluctuations on the shape of the spectral continuum
Silant'ev, N. A.; Alexeeva, G. A.
Astronomy and Astrophysics, Volume 479, Issue 1, February III 2008, pp.207-212

 2009ApJ...696.1972S

2009/05

Influence of Doppler Width Fluctuations on the Shape of Spectral Lines

- Silant'ev, N. A.;
- Lekht, E. E.;
- Alexeeva, G. A.

 5
2020AdSpR..65..780R
2020/01

Masers: Precision probes of molecular gas

- Richards, A. M. S.;
- Sobolev, A.;
- Baudry, A.
- *and 6 more*

 6
2021ApJ...908...30K
2021/02

Radiation Hydrodynamics of Turbulent H II Regions in Molecular Clouds: A Physical Origin of LyC Leakage and the Associated Lyα Spectra

- Kakiichi, Koki;
- Gronke, Max

Maser Sources in Astrophysics
M Gray - 2012 - books.google.com

Masers are observed at a range of scales-from comets, through star-forming clouds, to galactic nuclei-and have many astrophysical applications, for example measuring cosmological distances. Written for postgraduate students and professional researchers in …

Time variation of the water maser in ON2

Lekht, E. E., Trinidad, M. A., Mendoza-Torres, J. E., Rudnitskij, G. M., Tolmachev, A. M., 2006, Astron. Astrophys., V. 456, pp.145-150

A 1 B 3
A+2 B+0 P53
Citations A 3 B 3

Masers and star formation
Fish, Vincent L.
Astrophysical Masers and their Environments, Proceedings of the International Astronomical Union, IAU Symposium, Volume 242, p. 71-80, 2007

On a new cluster of H_2O maser spots in the source ON2

EE Lekht, AM Tolmachev, GM Rudnitskii - Astronomy letters, 2009 - Springer

We present the results of our observations of the H 2 O maser emission toward the complex source ON2 associated with an active star-forming region. The observations were performed in a wide range of radial velocities, from− 75 to 90 km s− 1. We have detected an emission …

Pulsations of the water-vapor maser in NGC 7538 IRS 1 with a period of about 0.9 year

EE Lekht, VA Munitsyn - Astronomy reports, 2010 - Springer

We report the results of a study of fast variations of the H 2 O maser emission toward NGC 7538 IRS 1, which is associated with a star-forming region. The study is based on monitoring data in the 1.35 cm line obtained in 1996–2003 on the 22-meter radio telescope of the …

Evolution of the H_2O Maser Emission Zone in ON2 N

EE Lekht, VI Slysh, AM Tolmachev - Astronomy Reports, 2010 - Springer

Results of a multi-faceted study of the H 2 O maser emission in the region ON2 N carried out on the Very Large Array (VLA, NRAO) and 22-m radio telescope of the Pushchino Radio Astronomy Observatory are reported. The envelope around the ultracompact HII region is …

2011PASJ...63...45A
2011/02

Astrometry of Galactic Star-Forming Region ON2N with VERA: Estimation of the Galactic Constants

- Ando, Kazuma;
- Nagayama, Takumi;
- Omodaka, Toshihiro
- *and 7 more*

6
2019ApJS..244....2K
2019/09

Simultaneous 22 GHz Water and 44 GHz Methanol Maser Survey of Ultracompact H II Regions

- Kim, Won-Ju;
- Kim, Kee-Tae;
- Kim, Kwang-Tae

Turbulent, steamy red supergiant winds, Richards

A.M.S., Bains, I., Bartkiewicz, A., (...), Vlemmings, W., Yates, J.A. Year the Document was Publish 2007, Source of the Document Proceedings of the International Astronomical Union
A 3 B 0 P55

Citations A 3 B 0

 2012msa..book.....G 2012/04
Maser Sources in Astrophysics

- Gray, Malcolm

 2
2010A&A...524A..99S
2010/12

Outburst OH maser activity in the envelopes of S Persei and VX Sagittarii *

- Szymczak, M.;
- Wolak, P.;
- Gérard, E.
- *and 1 more*

 3
2009arXiv0906.0209C
2009/06

Maser Studies in Evolved Stars

- Colomer, Francisco

Maser Misto, Richards, A.; Bains, I.; Bartkiewicz, A.; Diamond, P.; Etoka, S.; Gray, M. D.; Lekht, E. E.; Masheder, M. R. W.; Mendoza-Torres, E.; Murakawa, K.; Rosa-Gonzalez, D.; Szymczak, M.; van Langevelde, H. J.; Verhoelst, T.; Vlemmings, W.; Yates, J. A, 2008evn…confE…35R, 2008

A 1 B 0

2010A&A...524A..99S
2010/12

Outburst OH maser activity in the envelopes of S Persei and VX Sagittarii *

- **Szymczak, M.;**
- Wolak, P.;
- Gérard, E

3D Simulations of the Quiet Sun Radio Emission at Millimeter and Submillimeter Wavelengths

De La Luz, V., Lara, A., Mendoza, E., Shimojo, M., 2008, Geofísica Internacional, Vol. 47 (3), p. 197-203
Citations A 0 B 2

De la Luz, V.; Lara, A.; Mendoza-Torres, J. E.; Selhorst, C. L. **Pakal: A Three-dimensional Model to Solve the Radiative Transfer Equation.** 2010, ApJS, 188, 437D

De la Luz, V.; Lara, A.; Raulin, J. **Synthetic Spectra of Radio, Millimeter Sub-millimeter, and Infrared Regimes with Non-local Thermodynamic Equilibrium Approximation**. 2011, ApJ, 737, 1D

The solar plasma conditions in the source regions of two explosive events
Eduardo Mendoza-Torres, Klaus Wilhelm, Alejandro Lara, Astronomy and Astrophysics, 2009, 495, 613-620

Citations A 1 B 1

Curdt, W.; Tian, H.; Kamio, S. **Explosive Events: Swirling Transition Region Jets.** 2012, SoPh, 280, 417C

Mendoza-Torres, J. E**. The spatial distributions of the sources UV solar Explosive Events at different velocities**. 2013, AdSpR, 51, 76M

Pakal: A Three-dimensional Model to Solve the Radiative Transfer Equation
De la Luz, V., Lara, A.; Mendoza-Torres, J. E.; Selhorst, C. L., Caius L.
ApJS, 188, 437, 2010
A 3 B 6
A+0 B+1 P57

Citations A 3 B 7

Synthetic Spectra of Radio, Millimeter, Sub-millimeter, and Infrared Regimes with Non-local Thermodynamic Equilibrium Approximation
De la Luz, Victor; Lara, Alejandro; Raulin, Jean-Pierre
The Astrophysical Journal, 737:1 (8pp), 2011 August

The Chromospheric Solar Millimeter-wave Cavity Originates in the Temperature Minimum Region
De la Luz, Victor; Raulin, Jean-Pierre; Lara, Alejandro
The Astrophysical Journal, 762:84 (8pp), 2013

The Limb Brightening and its Relationship with the Millimeter-wave Cavity.
De la Luz, V.; Chavez, M.; Bertone, E.
New Quests in Stellar Astrophysics III: A Panchromatic View of Solar-Like Stars, With and Without Planets. Proceedings of an International Conference held at Puerto Vallarta, Jalisco, Mexico 12-16 March, 2012. Edited by M. Chavez, E. Bertone, O. Vega and V. De la Luz. San Francisco: Astronomical Society of the Pacific, 2013, p.253

The Relation Between the Radial Temperature Profile in the Chromosphere and the Solar Spectrum at Centimeter, Millimeter, Submillimeter, and Infrared …
V De la Luz, M Chavez, E Bertone, GG De Castro - Coronal Magnetometry, 2014 - Springer

Solar observations from millimeter to ultraviolet wavelengths show that there is a temperature minimum between photosphere and chromosphere. Analyses based on semi-empirical models locate this point at about 500 km above the photosphere. The consistency …

Origin of the 30 THz emission detected during the solar flare on 2012 March 13 at 17: 20 UT,

G Trottet, JP Raulin, A Mackinnon, GG De Castro… - Solar Physics, 2015 - Springer
Solar observations in the infrared domain can bring important clues on the response of the low solar atmosphere to primary energy released during flares. At present, the infrared continuum has been detected at 30 THz (10 μm) in only a few flares. SOL2012-03-13, which …

Study of Calibration of Solar Radio Spectrometers and the Quiet-Sun Radio Emission
C Tan, Y Yan, B Tan, Q Fu, Y Liu… - The Astrophysical …, 2015 - iopscience.iop.org

This work presents a systematic investigation of the influence of weather conditions on the calibration errors by using Gaussian fitness, least chi-square linear fitness, and wavelet transform to analyze the calibration coefficients from observations of the Chinese Solar …

Formation of the thermal infrared continuum in solar flares
PJA Simões, GS Kerr, L Fletcher, HS Hudson… - Astronomy & …, 2017 - aanda.org

Aims. Observations of the Sun with the Atacama Large Millimeter Array have now started, and the thermal infrared will regularly be accessible from the NSF's Daniel K. Inouye Solar Telescope. Motivated by the prospect of these new data, and by recent flare observations in …

Solar limb theoretical tomography at millimeter, sub-millimeter, and infrared wavelengths, V De la Luz, JA Gonzalez-Esparza… - Advances in Space …, 2016 - Elsevier
Semi-empirical models of the solar Chromosphere show, in their emission spectrum, tomography property at millimeter, sub-millimeter, and infrared wavelengths for the center of the solar disk. In this work, we studied this property in the solar limb using our numerical …

CAFE-PakalMPI: a new model to study the solar chromosphere in the NLTE approximation, JJ González-Avilés, V De la Luz - arXiv preprint arXiv:1808.07817, 2018 - arxiv.org

We present a new numerical model called CAFE-PakalMPI with the capability to solve the equations of classical magnetohydrodynamic (MHD) and to obtain the multispecies whose ionization states are calculated through statistical equilibrium, using the approximation of …

2020ApJS..246....5T
2020/01

Nonlinear Convergence of Solar-like Stars Chromospheres Using Millimeter, Submillimeter, and Infrared Observations

- Tapia-Vázquez, F.;
- De la Luz, V.

Evolved star water maser cloud size determined by star size,
Richards, A. M. S.; Etoka, S.; Gray, M. D.; Lekht, E. E.; Mendoza-Torres, J. E.; Murakawa, K.; Rudnitskij, G.; Yates, J. A., A&A, 546, 16, 2012
A 9 B 1
A+29 B+8 P58
Citations A 38 B 9

Sacuto, S.; Ramstedt, S.; Höfner, S.; Olofsson, H.; Bladh, S.; Eriksson, K.; Aringer, B.; Klotz, D.; Maercker, M. **The wind of the M-type AGB star RT Virginis probed by VLTI/MIDI.** 2013, A&A, 551A, 72S

Richards, A. M. S. **Mass Loss from Betelgeuse**. 2013, EAS, 60, 207R

Leal-Ferreira, M. L.; Vlemmings, W. H. T.; Kemball, A.; Amiri, N. **Magnetic fields around evolved stars: further observations of H2O maser polarization** . 2013, A&A, 554A, 134L

Imai, H.; Deguchi, S.; Nakashima, J.; Kwok, S.; Diamond, P. J. **The Spatiokinematical Structure of H2O and OH Masers in the "Water Fountain" Source IRAS 18460-0151**. 2013, ApJ, 773, 182I

Nesterenok, A. V. **Simulation of pumping mechanism of H2O-masers in circumstellar envelopes of late-type stars.** 2013, JPhCS, 461a2009N

Kusuno, K.; Asaki, Y.; Imai, H.; Oyama, T. **Distance and Proper Motion Measurement of the Red Supergiant, PZ Cas, in Very Long Baseline Interferometry H2O Maser Astrometry**. 2013, ApJ, 774, 107K

Nesterenok, A. V. **H2O maser emission in circumstellar envelopes around AGB stars: Physical conditions in gas-dust clouds**. 2013, AstL, 39, 717N

 2014ApJ...795...27H
2014/11

Non-Zeeman Circular Polarization of Molecular Maser Spectral Lines

- Houde, Martin

 10
2014PhDT.....308L
2014/11

Magnetic Fields And The Formation Of Aspherical Planetary Nebulae

- Leal Ferreira, Marcelo L.

 11
2014A&A...572L...9R
2014/12

ALMA sub-mm maser and dust distribution of VY Canis Majoris

- Richards, A. M. S.;
- Impellizzeri, C. M. V.;
- Humphreys, E. M.
- *and 25 more*

 12
2015ApJ...805...53C
2015/05

Water Masers in W43A: Early Morphological Changes of a Future Planetary Nebula

- Chong, Sze-Ning;
- Imai, Hiroshi;
- Diamond, Philip J

2015MNRAS.449.2875N 2015/05

Model of the vibrationally excited H2O maser at 658 GHz in circumstellar envelopes around asymptotic giant branch stars, Nesterenok, A. V.

2015ASPC..497..317S 2015/08
The 89.087 GHz HCN Maser in IRAS 15082-4808

- Smith, C. L.;
- Zijlstra, A. A.;
- Fuller, G. A

2016MNRAS.456..374G
2016/02

The physics of water masers observable with ALMA and SOFIA: model predictions for evolved stars

- Gray, M. D.;
- Baudry, A.;
- Richards, A. M. S

 2016MNRAS.456.4542M
2016/03

EU Del: exploring the onset of pulsation-driven winds in giant stars

- McDonald, I.;
- Zijlstra, A. A.;
- Sloan, G. C.
- *and 5 more*

 17
2017AJ....153..176L
2017/04

On the Relation of Silicates and SiO Maser in Evolved Stars

- Liu, Jiaming;
- Jiang, Biwei

 18
2017MNRAS.466.1963L
2017/04

On the silicate crystallinities of oxygen-rich evolved stars and their mass-loss rates

- Liu, Jiaming;

- Jiang, B. W.;
- Li, Aigen, *and 1 more*

 19
2017A&A...603A..77H
2017/07

Simultaneous 183 GHz H2O maser and SiO observations towards evolved stars using APEX SEPIA Band 5,
Humphreys, E. M. L.; Immer, K.; Gray, M. D. *and 10 more*

 20
2017AcASn..58...43A
2017/09

Radio Frequency Interference Mitigation

- An, T.;
- Chen, X.;
- Mohan, P.

The science case for simultaneous mm-wavelength receivers in radio astronomy
R Dodson, MJ Rioja, T Jung, JL Goméz… - New Astronomy …, 2017 - Elsevier

This review arose from the European Radio Astronomy Technical Forum (ERATec) meeting held in Firenze, October 2015, and aims to highlight the breadth and depth of the high-impact science that will be aided and assisted by the use of simultaneous mm-wavelength …

Mass loss of stars on the asymptotic giant branch
S Höfner, H Olofsson - The Astronomy and Astrophysics Review, 2018 - Springer

As low-and intermediate-mass stars reach the asymptotic giant branch (AGB), they have developed into intriguing and complex objects that are major players in the cosmic gas/dust cycle. At this stage, their appearance and evolution are strongly affected by a range of …

 2018A&A...615A..28D
2018/07

ALMA spectral line and imaging survey of a low and a high mass-loss rate AGB star between 335 and 362 GHz

- Decin, L.;
- Richards, A. M. S.;
- Danilovich, T.

- *and 2 more*

 24
2018A&A...616A.106V
2018/08

Determining the effects of clumping and porosity on the chemistry in a non-uniform AGB outflow

- Van de Sande, M.;
- Sundqvist, J. O.;
- Millar, T. J.
- *and 5 more*

 25
2018IAUS..336..347R
2018/08

Hot and cold running water: understanding evolved star winds

- Richards, A. M. S.;
- Gray, M. D.;
- Baudry, A

 2018IAUS..336..369T
2018/08

Submillimeter H2O maser emission from water fountain nebulae

- Tafoya, Daniel;
- Vlemmings, Wouter H. T.;
- Pérez-Sánchez, Andres F.

 27
2018A&A...618A.143N
2018/10

PACS and SPIRE range spectroscopy of cool, evolved stars

- Nicolaes, D.;
- Groenewegen, M. A. T.;
- Royer, P.
- *and 3 more*

 28

2018evn..confE..70A
2018/11

Detailed SiO proper motion analysis: slow net expansion and a small correlation with the magnetic field

- Assaf, K.;
- Cotton, B.;
- Diamond, P.
- *and 5 more*

□ 29
2019ApJ...875..114X
2019/04

Comparison of Gaia DR2 Parallaxes of Stars with VLBI Astrometry

- Xu, Shuangjing;
- Zhang, Bo;
- Reid, Mark J.
- *and 2 more*

□ 30
2019A&A...628A.132A
2019/08

Exploring the innermost dust formation region of the oxygen-rich AGB star IK Tauri with VLT/SPHERE-ZIMPOL and VLTI/AMBER

- Adam, C.;
- Ohnaka, K.

□ 31
2019MNRAS.488.1427K
2019/09

Time variations of H2O and SiO masers in the proto-Planetary Nebula OH 231.8+4.2

- Kim, Jaeheon;
- Cho, S. -H.;
- Bujarrabal, V.
- *and 4 more*

□ 32
2020AdPhX...559451S
2020/01

Light in curved two-dimensional space

- Schultheiss, Vincent H.;
- Batz, Sascha;
- Peschel, Ulf

 33
2020AdSpR..65..780R
2020/01

Masers: Precision probes of molecular gas

- Richards, A. M. S.;
- Sobolev, A.;
- Baudry, A.
- *and 6 more*

 34
2020A&A...638A..19B
2020/06

Submillimetre water masers at 437, 439, 471, and 474 GHz towards evolved stars. APEX observations and radiative transfer modelling

- Bergman, P.;
- Humphreys, E. M. L.

 35
2020MNRAS.497.2569S
2020/09

X-ray spectroscopy of the γ-ray brightest nova V906 Car (ASASSN-18fv)

- Sokolovsky, Kirill V.;
- Mukai, Koji;
- Chomiuk, Laura
- *and 15 more*

 36
2020A&A...643A.116D
2020/11

High-resolution spectroscopic study of massive blue and red supergiants in Perseus OB1. I. Definition of the sample, membership, and kinematics

- de Burgos, A.;
- Simon-Díaz, S.;
- Lennon, D. J.

- *and 5 more*

□ 37
2020A&A...644A..45B
2020/12

Water vapour masers in long-period variable stars. II. The semi-regular variables R Crt and RT Vir

- Brand, J.;
- Engels, D.;
- Winnberg, A.

□ 38
2021A&A...646A..98T
2021/02

The nature of VX Sagitarii. Is it a TŻO, a RSG, or a high-mass AGB star?

- Tabernero, H. M.;
- Dorda, R.;
- Negueruela, I.
- *and 1 more*

□ 39
2021A&A...654A..18V
2021/10

Maser emission from the CO envelope of the asymptotic giant branch star W Hydrae

- Vlemmings, W. H. T.;
- Khouri, T.;
- Tafoya, D.

□ 40
2022IAUS..366..204R
2022

Detailing evolved star wind complexity: comparing maser and thermal imaging

- Richards, A. M. S.;
- Assaf, K. A.;
- Baudry, A.
- *and 5 more*

□ 41
2022MNRAS.513.1354G
2022/06

Collisional and radiative pumping in 22-GHz water masers

- Gray, M. D.;
- Etoka, S.;
- Richards, A. M. S.
- *and 1 more*

□ 42
2022arXiv221004926J
2022/10

Sciences with Thai National Radio Telescope

- Jaroenjittichai, Phrudth;
- Sugiyama, Koichiro;
- Kramer, Busaba H.
- *and 44 more*

□ 43
2022ApJ...941..105X
2022/12

The Astrometric Animation of Water Masers toward the Mira Variable BX Cam

- Xu, Shuangjing;
- Imai, Hiroshi;
- Yun, Youngjoo
- *and 20 more*

□ 44
2022OAP....35...41K
2022/12

RT Vir - A Semiregular Star With Maser Emission: Mathematical Modelling of Optical Variability

- Kudashkina, L. S.;
- Andronov, I. L.

□ 45
2023A&A...671A.117V
2023/03

Polarisation of molecular lines in the circumstellar envelope of the post-asymptotic giant branch star OH 17.7-2.0

- Vlemmings, W. H. T.;

- Tafoya, D.

□ 46
2023A&A...674A.125B
2023/06

ATOMIUM: Probing the inner wind of evolved O-rich stars with new, highly excited H2O and OH lines

- Baudry, A.;
- Wong, K. T.;
- Etoka, S.
- *and 17 more*

□ 47
2024arXiv240104185L
2024/01

Maser polarization through anisotropic pumping

- Lankhaar, Boy;
- Surcis, Gabriele;
- Vlemmings, Wouter

On the sensitivity of the HAWC observatory to gamma-ray bursts
Astroparticle Physics, 35, 641-650, 2012, Abeysekara, A. U.; Aguilar, J. A.; Aguilar, S.; Alfaro, R.; Almaraz, E.; Álvarez, C. et al.
A 47 B 48
A+28 B+2 P68
Citations A 75 B 50

Horns, D.; Meyer, M. **Indications for a pair-production anomaly from the propagation of VHE gamma-rays.** 2012, JCAP, 02, 033H

Funk, S. **The status of gamma-ray astronomy**. 2012, arXiv1204, 4529F

Abdo, A. A.; Abeysekara, A. U.; Allen, B. T.; Aune, T.; Berley, D.; Chen, C.; Christopher, G. E.; DeYoung, T.; Dingus, B. L.; Ellsworth, R. W.; and 22 coauthors. **Constraints on the Emission Model of the "Naked-eye Burst" GRB 080319B.** 2012, ApJ, 753L, 31A

Langarica, R.; Lara, G.; Martinez, L. A.; Tinoco, S.; Alfaro, R.; Iriarte, A.; Sandoval, A.; Vanegas, P. **A system for the characterization of the HAWC PMTs sensitivity.** 2012, SPIE, 8453E, 34L

Sacahui, J. R.; Fraija, N.; González, M. M.; Lee, W. H. **The Long and the Short of the High-energy Emission in GRB090926A: An External Shock**. 2012, ApJ, 755, 127S

Castillo, M. A.; Salazar, H.; Tepe, A.; Villaseñor, L. M.; **HAWC Collaboration. Simulation of Fano factor at HAWC-30 array.** 2012, JPhCS.378a2003C

Kakuwa, J.; Murase, K; Toma, K.; Inoue, S.; Yamazaki, R.; Ioka, K**. Prospects for detecting gamma-ray bursts at very high energies with the Cherenkov Telescope Array**. 2012, MNRAS, 425, 514K

Iriarte, A.; Martínez, L. A.; Alfaro, R. **Vamos.** 2012, SPIE, 8443E, 38I

DeYoung, T.; HAWC Collaboration. **The HAWC observatory.** 2012, NIMPA, 692, 72D

Fraija, N.; González, M. M.; Ramirez, J. L.; Sacahui, R.; Lee, W. H. **On external shock model to explain the high-energy emission: GRB 940217, GRB 941017 and GRB 970217A.** 2012, AIPC, 1505, 681F

de la Fuente, E.; Oceguera-Becerra, T.; García-Torales, G.; García-Luna, J. L. **The High Altitude Water Čerenkov (HAWC) TeV Gamma Ray Observatory**. 2013, ASSP, 34, 439D

Inoue, S.; Granot, J.; O'Brien, P. T.; Asano, K.; Bouvier, A.; Carosi, A.; Connaughton, V.; Garczarczyk, M.; Gilmore, R.; Hinton, J.; and 17 coauthors. **Gamma-ray burst science in the era of the Cherenkov Telescope Array**. 2013, APh, 43, 252I

Iuppa, R.; Di Sciascio, G.**Time-average-based Methods for Multi-angular Scale Analysis of Cosmic-Ray Data**. 2013, ApJ, 766, 96I

Vianello, G. **Observations of Gamma-ray Bursts in the Fermi era**. 2013, arXiv1304, 5570V

Gilmore, R. C.; Bouvier, A.; Connaughton, V.; Goldstein, A.; Otte, N.; Primack, J. R.; Williams, D. A**. IACT observations of gamma-ray bursts: prospects for the Cherenkov Telescope Array**. 2013, ExA, 35, 413G

Hinton, J. A.; Starling, R. L. C. **High-energy emission from transients.** 2013, RSPTA, 37120279H

Smith, M. W. E.; Fox, D. B.; Cowen, D. F.; Mészáros, P.; Tešić, G.; Fixelle, J.; Bartos, I.; Sommers, P.; Ashtekar, A.; Jogesh Babu, G.; and 9 coauthors. **The Astrophysical Multimessenger Observatory Network (AMON).** 2013, APh, 45, 56S

Otte, N.; Errando, M.; Griffiths, S.; Kaaret, P.; Krawczynski, H.; McCann, A.; Sinnis, G.; Stecker, F.; Taboada, I.; Vasileiou, V.; Zitzer, B. **Tests of Lorentz Invariance Violation with Gamma Rays to probe Quantum Gravity**. 2013, arXiv1305, 0264O

Gaisser, T. K. **Very high energy photons and neutrinos: Implications for UHECR**. 2013, EPJWC, 5301012G

2013NuPhS.239..220B 1.000 06/2013 A E R U
Baughman, B. M. Status and updates from the High Altitude

Water Cherenkov (HAWC) Observatory

2013PhRvD..87l2001V 1.000 06/2013 A E X R C U
Vasileiou, V.; Constraints on Lorentz invariance violation
Jacholkowska, A.; Piron, F.; from Fermi-Large Area Telescope observations
Bolmont, J.; Couturier, C.; of gamma-ray bursts
Granot, J.; Stecker, F. W.;
Cohen-Tanugi, J.; Longo, F.

2013arXiv1310.0071H 1.000 09/2013 A X R C U
HAWC Collaboration; The HAWC Gamma-Ray Observatory: Sensitivity
Abeysekara, A. U.; Alfaro, R.; to Steady and Transient Sources of Gamma Rays
Alvarez, C.; Álvarez, J. D.;
Arceo, R.;
Arteaga-Velázquez, J. C.;
Ayala Solares, H. A.;
Barber, A. S.; Baughman, B. M.;
and 91 coauthors

2013arXiv1310.0073H 1.000 09/2013 A X R C U
HAWC Collaboration; The HAWC Gamma-Ray Observatory: Dark Matter,
Abeysekara, A. U.; Alfaro, R.; Cosmology, and Fundamental Physics
Alvarez, C.; Álvarez, J. D.;
Arceo, R.;
Arteaga-Velázquez, J. C.;
Ayala Solares, H. A.;
Barber, A. S.; Baughman, B. M.;
and 91 coauthors

2013arXiv1310.0074H 1.000 09/2013 A X R C U
HAWC Collaboration; The HAWC Gamma-Ray Observatory: Design,
Abeysekara, A. U.; Alfaro, R.; Calibration, and Operation
Alvarez, C.; Álvarez, J. D.;
Arceo, R.;
Arteaga-Velázquez, J. C.;
Ayala Solares, H. A.;
Barber, A. S.; Baughman, B. M.;
and 91 coauthors

2013IJMPD..2260010S 1.000 09/2013 A E R U
Sinnis, G. TeV Astrophysics with the MILAGRO and Hawc
Observatories

2013A&A...560A..67T 1.000 12/2013 A E F X R C S U
Tchernin, C.; Aguilar, J. A.; Neutrino signal from extended Galactic
Neronov, A.; Montaruli, T. sources in IceCube

2013APh....50...26A 1.000 12/2013 A E X R C U
Abeysekara, A. U.; Alfaro, R.; Sensitivity of the high altitude water
Alvarez, C.; Álvarez, J. D.; Cherenkov detector to sources of multi-TeV

Arceo, R.; gamma rays
Arteaga-Velázquez, J. C.;
Ayala Solares, H. A.;
Barber, A. S.; Baughman, B. M.;
Bautista-Elivar, N.;
and 90 coauthors

2014arXiv1401.3012M 1.000 01/2014 A X R U
Meszaros, P.; Rees, M. J. Gamma-Ray Bursts

Observation of the Crab Nebula with the HAWC Gamma-Ray Observatory

AU Abeysekara, A Albert, R Alfaro… - The Astrophysical …, 2017 - iopscience.iop.org
Abstract The Crab Nebula is the brightest TeV gamma-ray source in the sky and has been used for the past 25 years as a reference source in TeV astronomy, for calibration and verification of new TeV instruments. The High Altitude Water Cherenkov Observatory …
Citado por 93 Artículos relacionados Las 10 versiones
[PDF] arxiv.org

Search for gamma-rays from the unusually bright GRB 130427A with the HAWC Gamma-ray Observatory

AU Abeysekara, R Alfaro, C Alvarez… - The Astrophysical …, 2015 - iopscience.iop.org
The first limits on the prompt emission from the long gamma-ray burst (GRB) 130427A in the> 100 GeV energy band are reported. GRB 130427A was the most powerful burst ever detected with a redshift z lesssim 0.5 and featured the longest lasting emission above 100 …
Citado por 38 Artículos relacionados Las 12 versiones
[PDF] arxiv.org

Ground-based detectors in very-high-energy gamma-ray astronomy

M De Naurois, D Mazin - Comptes Rendus Physique, 2015 - Elsevier
Following the discovery of the cosmic rays by Victor Hess in 1912, more than 70 years and numerous technological developments were needed before an unambiguous detection of the first very-high-energy gamma-ray source in 1989 was made. Since this discovery, the …
Citado por 36 Artículos relacionados Las 8 versiones
[PDF] arxiv.org

Multi-messenger tests for fast-spinning newborn pulsars embedded in stripped-envelope supernovae

K Kashiyama, K Murase, I Bartos, K Kiuchi… - The Astrophysical …, 2016 - iopscience.iop.org
Fast-spinning strongly magnetized newborn neutron stars (NSs), including nascent magnetars, are popularly implemented as the engine of luminous stellar explosions. Here, we consider the scenario that they power various stripped-envelope (SE) supernovae (SNe) …
Citado por 31 Artículos relacionados Las 7 versiones

Prospects for the detection of GRBs with HAWC

I Taboada, RC Gilmore - Nuclear Instruments and Methods in Physics …, 2014 - Elsevier
Fermi LAT has shown that GRBs produce photons in the range 10–94 GeV (126 GeV redshift corrected for GRB 130427A). Limited detector size constrains the sensitivity of space borne instruments at the highest energies. Ground based instruments can extend …
Citado por 24 Artículos relacionados Las 11 versiones
[PDF] uni-dortmund.de

Online analysis of high-volume data streams in astroparticle physics

C Bockermann, K Brügge, J Buss, A Egorov… - … Conference on Machine …, 2015 - Springer
Experiments in high-energy astroparticle physics produce large amounts of data as continuous high-volume streams. Gaining insights from the observed data poses a number of challenges to data analysis at various steps in the analysis chain of the experiments …
Citado por 20 Artículos relacionados Las 9 versiones
[PDF] arxiv.org

Milagro limits and HAWC sensitivity for the rate-density of evaporating Primordial Black Holes

AA Abdo, AU Abeysekara, R Alfaro, BT Allen… - Astroparticle …, 2015 - Elsevier
Abstract Primordial Black Holes (PBHs) are gravitationally collapsed objects that may have been created by density fluctuations in the early universe and could have arbitrarily small masses down to the Planck scale. Hawking showed that due to quantum effects, a black …
Citado por 19 Artículos relacionados Las 18 versiones

HAWC: A next-generation all-sky gamma-ray telescope

S Westerhoff, HAWC Collaboration - Advances in Space Research, 2014 - Elsevier
Abstract The High-Altitude Water Cherenkov (HAWC) Gamma-Ray Observatory is currently under construction 4100 m above sea level on the slope of Pico de Orizaba in Mexico. HAWC is a high-duty cycle, large field-of-view instrument capable of monitoring the gamma …
Citado por 19 Artículos relacionados Las 4 versiones
[PDF] arxiv.org

GRB 110731A: Early afterglow in stellar wind powered by a magnetized outflow

N Fraija - The Astrophysical Journal, 2015 - iopscience.iop.org
One of the most energetic gamma-ray bursts, GRB 110731A, was observed from an optical to GeV energy range. Previous analysis of the prompt phase revealed similarities between the Large Area Telescope (LAT) bursts observed by Fermi:(1) a delayed onset of the high …
Citado por 17 Artículos relacionados Las 7 versiones
[HTML] springer.com

High-energy neutrinos from the gravitational wave event GW150914 possibly associated with a short gamma-ray burst

R Moharana, S Razzaque, N Gupta, P Mészáros - Physical Review D, 2016 - APS
High-energy neutrinos (HEN) and gravitational waves (GW) can probe astrophysical sources in addition to electromagnetic observations. Multimessenger studies can reveal the nature of the sources, which may not be discerned from one type of signal alone. We discuss …
Citado por 15 Artículos relacionados Las 7 versiones
[HTML] sciencedirect.com

Gamma-ray bursts at high and very high energies

F Piron - Comptes Rendus Physique, 2016 - Elsevier
Abstract Gamma-Ray Bursts (GRBs) are extra-galactic and extremely energetic transient emissions of gamma rays, which are thought to be associated with the death of massive stars or the merger of compact objects in binary systems. Their huge luminosities involve the …
Citado por 15 Artículos relacionados Las 10 versiones

Modeling the Early Afterglow in the Short and Hard GRB 090510

N Fraija, WH Lee, P Veres… - The Astrophysical Journal, 2016 - iopscience.iop.org
The bright, short, and hard GRB 090510 was detected by all instruments aboard the Fermi and Swift satellites. The multiwavelength observations of this burst presented similar features to the Fermi-LAT-detected gamma-ray bursts. In the framework of the external shock …
Citado por 13 Artículos relacionados Las 7 versiones
[PDF] arxiv.org

Search for Very-high-energy Emission from Gamma-Ray Bursts Using the First 18 Months of Data from the HAWC Gamma-Ray Observatory

R Alfaro, C Alvarez, JD Álvarez, R Arceo… - The Astrophysical …, 2017 - iopscience.iop.org
Abstract The High Altitude Water Cherenkov (HAWC) Gamma-ray Observatory is an extensive air shower detector operating in central Mexico that has recently completed its first two years of full operations. If for a burst like GRB 130427A at a redshift of 0.34 and a high …
Citado por 12 Artículos relacionados Las 9 versiones
[PDF] arxiv.org

VAMOS: A pathfinder for the HAWC gamma-ray observatory

AU Abeysekara, R Alfaro, C Alvarez, JD Álvarez… - Astroparticle …, 2015 - Elsevier
VAMOS 1 was a prototype detector built in 2011 at an altitude of 4100 m asl in the state of Puebla, Mexico. The aim of VAMOS was to finalize the design, construction techniques and data acquisition system of the HAWC observatory. HAWC is an air-shower array currently …
Citado por 10 Artículos relacionados Las 13 versiones
[PDF] arxiv.org

The IceProd framework: Distributed data processing for the IceCube neutrino observatory

MG Aartsen, R Abbasi, M Ackermann, J Adams… - Journal of parallel and …, 2015 - Elsevier
IceCube is a one-gigaton instrument located at the geographic South Pole, designed to detect cosmic neutrinos, identify the particle nature of dark matter, and study high-energy neutrinos themselves. Simulation of the IceCube detector and processing of data require a …
Citado por 9 Artículos relacionados Las 17 versiones
[PDF] arxiv.org

First results from HAWC on GRBs

D Lennarz, I Taboada - arXiv preprint arXiv:1508.07325, 2015 - arxiv.org
In this contribution, the first results of HAWC, searching for VHE gamma-ray emission from gamma-ray bursts (GRBs) reported by $\mathit {Swift} $, are presented. The HAWC gamma-ray observatory is operating in central Mexico at an altitude of 4,100 m above sea level. With …
Citado por 9 Artículos relacionados Las 5 versiones
[PDF] arxiv.org

The deep and transient universe in the SVOM Era: new challenges and opportunities-scientific prospects of the SVOM mission

J Wei, B Cordier, S Antier, P Antilogus, JL Atteia… - arXiv preprint arXiv …, 2016 - arxiv.org
To take advantage of the astrophysical potential of Gamma-Ray Bursts (GRBs), Chinese and French astrophysicists have engaged the SVOM mission (Space-based multi-band astronomical Variable Objects Monitor). Major advances in GRB studies resulting from the …
Citado por 7 Artículos relacionados Las 27 versiones
[PDF] arxiv.org

The Very High Energy Sky from~ 20 GeV to Hundreds of TeV-Selected Highlights

M de Naurois - arXiv preprint arXiv:1510.00635, 2015 - arxiv.org
After nearly a decade of operation, the three major arrays of atmospheric Cherenkov telescopes have revolutionized our view of the Very High Energy Universe, unveiling more than 100 sources of various types. MAGIC, consisting of two 17 m diameter telescopes on …
Citado por 7 Artículos relacionados Las 6 versiones
[PDF] inspirehep.net

Observation of Cosmic-Ray Anisotropy at TeV and PeV Energies in the Southern Sky

JM Santander - 2013 - inspirehep.net
Cosmic rays in the TeV to PeV energy range are believed to originate in our galaxy, possibly in local astrophysical accelerators such as supernova remnants. After escaping from their sources, cosmic rays propagate through the interstellar medium where they scatteroff …
Citado por 7 Artículos relacionados Las 3 versiones
[PDF] arxiv.org

The needle in the hundred square degree haystack: The hunt for binary neutron star mergers with LIGO and Palomar Transient Factory

LP Singer - arXiv preprint arXiv:1501.03765, 2015 - arxiv.org

The Advanced LIGO and Virgo experiments are poised to detect gravitational waves (GWs) directly for the first time this decade. The ultimate prize will be joint observation of a compact binary merger in both gravitational and electromagnetic channels. However, GW sky …
Citado por 6 Artículos relacionados Las 9 versiones

Calibration of a large water-Cherenkov detector at the Sierra Negra site of LAGO

A Galindo, E Moreno, E Carrasco, I Torres… - Nuclear Instruments and …, 2017 - Elsevier
Abstract The Latin American Giant Observatory (LAGO) is an international network of water-Cherenkov detectors (WCD) set in different sites across Latin America. On top of the Sierra Negra volcano in Mexico at an altitude of 4530 m, LAGO has completed its first out of three …
Citado por 6 Artículos relacionados Las 6 versiones
[HTML] royalsocietypublishing.org

Searching for high-energy gamma-ray counterparts to gravitational-wave sources with Fermi-LAT: A needle in a haystack

G Vianello, N Omodei, J Chiang… - The Astrophysical …, 2017 - iopscience.iop.org
At least a fraction of gravitational-wave (GW) progenitors are expected to emit an electromagnetic (EM) signal in the form of a short gamma-ray burst (sGRB). Discovering such a transient EM counterpart is challenging because the LIGO/VIRGO localization region …
Citado por 5 Artículos relacionados Las 7 versiones
[PDF] arxiv.org

The potential of the HAWC Observatory to observe violations of Lorentz Invariance

L Nellen - arXiv preprint arXiv:1508.03930, 2015 - arxiv.org
The framework of relativistic quantum-field theories requires Lorentz Invariance. Many theories of quantum gravity, on the other hand, include violations of Lorentz Invariance at small scales and high energies. This generates a lot of interest in establishing limits on such …
Citado por 5 Artículos relacionados Las 5 versiones
[PDF] arxiv.org

Altitude survey of the galactic cosmic ray flux with a Mini Neutron Monitor

A Lara, A Borgazzi, R Caballero-Lopez - Advances in Space Research, 2016 - Elsevier
We present the results of a survey of the galactic cosmic ray (GCR) flux measured at different altitudes, from the sea level, up to~ 4600 m asl This altitude survey was carried out with a "Mini" Neutron Monitor (MNM), and performed inside a small area of the central part of …
Citado por 5 Artículos relacionados Las 3 versiones
[PDF] arxiv.org

On the prospects of gamma-ray burst detection in the TeV band

I Vurm, AM Beloborodov - The Astrophysical Journal, 2017 - iopscience.iop.org
A gamma-ray burst (GRB) jet running into an external medium is expected to generate luminous GeV–TeV emission lasting from minutes to several hours. The high-energy emission results from inverse Compton upscattering of prompt and afterglow photons by …
Citado por 4 Artículos relacionados Las 5 versiones

Searching for PeV neutrinos from photomeson interactions in magnetars

RK Dey, S Ray, S Dam - EPL (Europhysics Letters), 2016 - iopscience.iop.org
In this paper we estimate the flux of PeV neutrinos and gamma-rays from magnetar polar caps, assuming that ions/protons are injected, and accelerated in these regions and interact with the radiative background. The present study takes into account the effect of the photon …
Citado por 3 Artículos relacionados Las 6 versiones
[PDF] arxiv.org

Data acquisition architecture and online processing system for the HAWC gamma-ray observatory

AU Abeysekara, R Alfaro, C Alvarez, JD Álvarez… - Nuclear Instruments and …, 2018 - Elsevier
Abstract The High Altitude Water Cherenkov observatory (HAWC) is an air shower array devised for TeV gamma-ray astronomy. HAWC is located at an altitude of 4100 m asl in Sierra Negra, Mexico. HAWC consists of 300 Water Cherenkov Detectors, each …
Citado por 3 Artículos relacionados Las 7 versiones
[PDF] arxiv.org

All-sky sensitivity of HAWC to Gamma-Ray Bursts

J Wood - arXiv preprint arXiv:1508.04120, 2015 - arxiv.org
The High Altitude Water Cherenkov (HAWC) Observatory is a ground-based TeV gamma-ray observatory in the state of Puebla, Mexico at an altitude of 4100 m. Its 22,000 m $^ 2$ instrumented area, wide field of view ($\sim $2 sr), and> 95% uptime make it an ideal …
Citado por 3 Artículos relacionados Las 5 versiones
[PDF] arxiv.org

The origin of the optical flashes: The case study of GRB 080319B and GRB 130427A

N Fraija, P Veres - The Astrophysical Journal, 2018 - iopscience.iop.org
Correlations between optical flashes and gamma-ray emissions in gamma-ray bursts (GRBs) have been searched in order to clarify the question of whether these emissions occur at internal and/or external shocks. Among the most powerful GRBs ever recorded are …
Citado por 3 Artículos relacionados Las 5 versiones
[PDF] sciencedirect.com

First Results from the High-altitude Water Cherenkov Observatory

S BenZvi - Physics Procedia, 2015 - Elsevier
Abstract The High-Altitude Water Cherenkov (HAWC) Observatory is designed to observe extensive air showers produced by cosmic rays and gamma rays between 50 GeV and 100 TeV. HAWC is unique among existing TeV detectors because it can be used to observe air …
Citado por 2 Artículos relacionados Las 4 versiones
[PDF] arxiv.org

Sensitivity of the HAWC Observatory to Gamma-ray Bursts Using the Scaler System

D Lennarz - The Sensitivity of HAWC to Steady and Transient …, 2017 - arxiv.org
Gamma-ray bursts (GRBs) are among the most energetic phenomena in the known universe and are predicted to emit very-high-energy (VHE,> 100 GeV) gamma-ray radiation. The High Altitude Water Cherenkov (HAWC) observatory is a ground based VHE gamma-ray detector …
Citado por 2 Artículos relacionados Las 8 versiones
arxiv.org

Gamma Ray Bursts in the HAWC Era

P Mészáros, K Asano, K Murase, D Fox, H Gao… - arXiv preprint arXiv …, 2015 - arxiv.org
Gamma-Ray Bursts are the most energetic explosions in the Universe, and are among the most promising for detecting multiple non-electromagnetic signals, including cosmic rays, high energy neutrinos and gravitational waves. The multi-GeV to TeV gamma-ray range of …
Citado por 2 Artículos relacionados Las 6 versiones
arxiv.org

Milagro observations of potential TeV emitters

AA Abdo, AU Abeysekara, BT Allen, T Aune… - Astroparticle …, 2014 - Elsevier
This paper reports the results from three targeted searches of Milagro TeV sky maps: two extragalactic point source lists and one pulsar source list. The first extragalactic candidate list consists of 709 candidates selected from the Fermi-LAT 2FGL catalog. The second …
Citado por 2 Artículos relacionados Las 18 versiones
arxiv.org

Search for high-energy emission from GRBs with the HAWC Observatory

K Sparks - The Sensitivity of HAWC to Steady and Transient …, 2017 - arxiv.org
A second generation water Cherenkov detector, the High Altitude Water Cherenkov (HAWC) Observatory is currently being constructed in Sierra Negra, Mexico at an altitude of 4100 m asl. With higher altitude than its predecessor Milagro, HAWC will be almost two orders of …
Citado por 2 Artículos relacionados Las 8 versiones

Probing massive stars around gamma-ray burst progenitors

W Lu, P Kumar, GF Smoot - Monthly Notices of the Royal …, 2015 - academic.oup.com
Long gamma-ray bursts (GRBs) are produced by ultra-relativistic jets launched from core collapse of massive stars. Most massive stars form in binaries and/or in star clusters, which means that there may be a significant external photon field (EPF) around the GRB …
Citado por 2 Artículos relacionados Las 8 versiones
worldscientific.com

Gamma-Ray Astronomy with the Hawc Observatory

HAWC Collaboration), RJ LAUER - International Journal of Modern …, 2014 - World Scientific

The High Altitude Water Cherenkov (HAWC) Observatory is a wide field-of-view gamma-ray detector, sensitive to primary energies between 50 GeV and 100 TeV. The array is being built at an altitude of 4,100 m on the Sierra Negra volcano in Puebla, Mexico. With a duty …
Citado por 2 Artículos relacionados Las 4 versiones

The HAWC GRB programme

D Lennarz, I Taboada, J Wood… - AIP Conference …, 2017 - aip.scitation.org
HAWC is a very-high-energy gamma-ray observatory operating in central Mexico at an altitude of 4, 100 m above sea level. It has an instantaneous field of view of 2 sr and surveys 2/3 of the sky every day. The duty cycle (up time fraction) of over 95% and the lack of …
Citado por 2 Artículos relacionados Las 4 versiones
arxiv.org

A Third Generation Water Cherenkov Observatory

A Sandoval - The Design, Calibration, and Operation of HAWC …, 2017 - arxiv.org
The construction of the High Altitude Water Cherenkov (HAWC) gamma ray observatory will be completed in 2014. By September of 2013, HAWC will start continuous operations with the first third of the 300-detector array. As the commissioning of the instrument is …
Citado por 1 Artículos relacionados Las 8 versiones
arxiv.org

The Galactic cosmic-ray Sun shadow observed by HAWC

O Enriquez, A Lara - arXiv preprint arXiv:1508.07351, 2015 - arxiv.org
The magnetic field of the Solar corona is difficult to measure directly. However, indirect observations of the solar corona are possible using the deficit in flux of cosmic rays coming from the direction of the Sun. Low-energy cosmic rays (~ GeV) are deflected by the inner …
Citado por 1 Artículos relacionados Las 3 versiones
cambridge.org

First results from HAWC: monitoring the TeV gamma-ray sky

RJ Lauer, HAWC Collaboration - Proceedings of the International …, 2014 - cambridge.org
The High Altitude Water Cherenkov (HAWC) Observatory is a wide-field gamma-ray detector sensitive to primary energies between 100 GeV and 100 TeV. The array is being built at an altitude of 4100 m asl on the Sierra Negra volcano near Puebla, Mexico. Data taking has …
Citado por 1 Artículos relacionados Las 5 versiones
sissa.it

The Galactic cosmic-ray Sun shadow observed by HAWC

O Enriquez-Rivera, A Lara - The 34th International Cosmic Ray …, 2016 - pos.sissa.it
For an observer on Earth, the Sun and the Moon block a portion of the Galactic cosmic ray (GCR) flux casting a shadow equal to their physical angular size [1], both roughly 0.5◦ in diameter. The Moon shadow has been used to calibrate the pointing accuracy and angular …
Citado por 2 Artículos relacionados Las 3 versiones

The High Altitude water Cherenkov (HAWC) Observatory

W Springer - … PARTICLE, SPACE PHYSICS AND DETECTORS FOR …, 2014 - World Scientific
The High Altitude Water Cherenkov (HAWC) observatory is a continuously operated, wide field of view detector based upon a water Cherenkov technology developed by the Milagro experiment. HAWC observes, at an elevation of 4100 m on Sierra Negra Mountain in …

Scientific verification of High Altitude Water Cherenkov observatory

A Marinelli, K Sparks, R Alfaro, MM González… - Nuclear Instruments and …, 2014 - Elsevier
Abstract The High Altitude Water Cherenkov (HAWC) observatory is a TeV gamma-ray and cosmic-ray detector currently under construction at an altitude of 4100 m close to volcano Sierra Negra in the state of Puebla, Mexico. The HAWC [1] observatory is an extensive air …

Black hole astrophysics with HAWC, the High Altitude Water Cherenkov γ-ray observatory

A Carramiñana, HAWC Collaboration - Proceedings of the …, 2016 - cambridge.org
The HAWC gamma-ray observatory is a wide field of view and high duty cycle γ-ray detector investigating the 0.1-100 TeV energy range. It has detected supermassive black holes in the near Universe, and is seeking to detect black hole related objects like gamma-ray bursts …
Citado por 1 Artículos relacionados Las 5 versiones

Prospects for Gamma Ray Bursts detection with LHAASO

CF Vigorito - The 34th International Cosmic Ray Conference, 2016 - pos.sissa.it
Gamma Ray Bursts are among the most powerful sources in the sky, with an energy spectrum extending from radio to gamma rays of tens of GeV. They occur with a frequency of a few per day, and originate from the entire universe. GRBs are divided into two classes …
Artículos relacionados Las 4 versiones

Optimization Of Gamma/Hadron Separation Under Variable

AT Fullmer - 2014 - The University of Utah
Artículos relacionados
pucp.edu.pe

Disentangling atmospheric cascades started by gamma rays from cosmic rays with CORSIKA

J Rengifo Gonzáles - 2017 - tesis.pucp.edu.pe
In this work we search for a method to differentiate between particle showers produced by cosmic rays and by gamma rays at TeV energies, using CORSIKA simulations. This method tries to solve the dominant hadron flux background problem when looking for gamma-ray …
Artículos relacionados Las 5 versiones

HAWC Sensitivity for the Rate-Density of Evaporating Primordial Black Holes

TN UKWATTA, JH MACGIBBON, D STUMP… - Dark Matter, Cosmology …, 2017 - arxiv.org

Primordial black holes (PBHs) are hypothetical black holes that may have formed from extreme densities of matter present during the early universe. Hawking showed that due to quantum-gravitational effects, a black hole possesses a temperature inversely proportional …
Artículos relacionados Las 6 versiones
cuni.cz

Study of Interactions of Cosmic Rays at Ultra-high Energies

P Nečesal - 2015 - dspace.cuni.cz
This thesis is dedicated to study of interactions of utra-high energy cosmic rays using measured data from the Pierre Auger Observatory, automatic alarm system called Shift Guard and analysis of correlation of temperature and detector response. The Pierre Auger …
Artículos relacionados Las 2 versiones

HAWC Sensitivity for the Rate-Density of Evaporating Primordial Black Holes

D Lennarz - inspirehep.net
Primordial black holes (PBHs) are hypothetical black holes that may have formed from extreme densities of matter present during the early universe. Hawking showed that due to quantum-gravitational effects, a black hole possesses a temperature inversely proportional …
Artículos relacionados Las 3 versiones
nasa.gov

All-sky observations with HAWC: latest results

JC Arteaga-Velázquez… - Journal of Physics …, 2015 - iopscience.iop.org
Abstract The High Altitude Water Cherenkov (HAWC) observatory is a ground-based air-shower detector designed to study cosmic rays and gamma rays with energies from 100 GeV up to 100 TeV. HAWC simultaneously surveys 2sr of the northern sky with a high duty …
Artículos relacionados Las 4 versiones
[HTML] proquest.com

[HTML] First year results from the HAWC observatory

Sabrina Casanova for the HAWC … - EPJ Web of …, 2017 - search.proquest.com
Abstract The High Altitude Water Cherenkov Observatory is an all-sky surveying instrument sensitive to gamma rays and cosmic rays from 100GeV to 100TeV. With its 2sr instantaneous field of view and a duty cycle of> 95%, HAWC is carrying out an unbiased …
Artículos relacionados
arxiv.org

Future Ground-based Wide Field of View Air Shower Detectors

G Di Sciascio - arXiv preprint arXiv:1802.04773, 2018 - arxiv.org
Extensive air shower (EAS) arrays directly sample the shower particles that reach the observation altitude. They are wide field of view (FoV) detectors able to view the whole sky simultaneously and continuously. In fact, EAS arrays have an effective FoV of about 2 sr and …

Artículos relacionados Las 7 versiones
spiedigitallibrary.org

Sensitivity of ICAL to TeV Gamma Rays at INO

N Dash, R Moharana - Advanced Detectors for Nuclear, High Energy and …, 2018 - Springer
We report the sensitivity of Iron CALorimeter (ICAL) detector to the detection of TeV gamma rays from various astrophysical sources at India-based Neutrino Observatory (INO). The ICAL detector is proposed to be of 51 kton with an average magnetic field of ~ 1.3 T. The …
Artículos relacionados Las 4 versiones

Highlights from the HAWC telescope

S Casanova - 2017 - World Scientific
The High Altitude Water Cherenkov (HAWC) Gamma-Ray Observatory is a water Cherenkov ground array with the capability to distinguish 100 GeV-100 TeV gamma rays from the hadronic cosmic-ray background. HAWC is uniquely suited to study extremely high energy …
Artículos relacionados Las 3 versiones

First results from HAWC: monitoring the TeV gamma-ray sky

F Massaro, CC Cheung, E Lopez, A Siemiginowska - cambridge.org
The High Altitude Water Cherenkov (HAWC) Observatory is a wide-field gammaray detector sensitive to primary energies between 100 GeV and 100 TeV. The array is being built at an altitude of 4100 m asl on the Sierra Negra volcano near Puebla, Mexico. Data taking has …

Calibration and Reconstruction Performance of the HAWC Observatory

RJ LAUER - The Design, Calibration, and Operation of HAWC …, 2017 - arxiv.org
The High Altitude Water Cherenkov (HAWC) experiment is being built at an altitude of 4100 m at Sierra Negra volcano near Puebla, Mexico, to serve as an observatory for gamma-rays with energies between 50 GeV and 100 TeV. Upon completion, the array will consist of 300 …
Artículos relacionados Las 8 versiones
core.ac.uk

Studies Of Astrophysical Very-High Energy Gamma-Ray Emission With Theamsh Khalil - Core.Ac.Uk

In this study, the search for the very-high energy γ-ray emission using the data measured by the Auger lowenergy scaler mode of surface detector (SD) array (Auger single particle technique (SPT) and/or Auger SD scalers) has been performed. The Auger scaler dataset …

Searching for primordial black hole evaporation signal with AMON

G Tešić - The 34th International Cosmic Ray Conference, 2016 - pos.sissa.it
Primordial Black Holes (PBHs) may have been created from the gravitational collapse of overdense regions in the early universe. The initial masses of PBHs are of the order of the particle horizon mass at the time when they were formed: MH= c3t/G [1, 2]. Since the exact …
Artículos relacionados Las 3 versiones

iop.org

Very High Energy Gamma Ray Bursts: Predictions for New Ground Based Telescopes

I Morgan, J Racusin, J Perkins… - American …, 2014 - www-glast.stanford.edu
Abstract To date no Gamma Ray Bursts (GRBs) have been detected in the Very High Energy (VHE) Range (100 GeV-100 TeV). However, upgrades to the current generation of ground based air Cherenkov telescopes such as HESS, VERITAS and MAGIC make them more …

TeV γ-ray astronomy with ground-based air-shower arrays

MA Mostafá - EPJ Web of Conferences, 2016 - epj-conferences.org
The TeV energy band is a very exciting window into the origin of high energy cosmic radiation, particle acceleration, and the annihilation of dark matter particles. Above a few hundred GeV, ground-based experiments of very large effective areas open a new domain …

[DOC] Optimization of Gamma/hadron Separation Uder Variable Source Intensities and Energy Spectra

AT Fullmer, D Kieda, C DeTar, A Seth, SD Torti - 2014 - academia.edu
ABSTRACT The High Altitude Water Cherenkov (HAWC) gamma-ray observatory consists of an array of water Cherenkov tanks that can detect extensive air showers (EAS) generated by astrophysical cosmic rays and gamma rays. One of the greatest challenges in using the …
Artículos relacionados
spiedigitallibrary.org

[LIBRO] Starlight beneath the waves: in search of TeV photon emission from Gamma-Ray Bursts with the ANTARES Neutrino Telescope

TL Astraatmadja - 2013 - inspirehep.net
Propositions associated with the dissertation Starlight beneath the waves … In search of TeV photon emission from Gamma-Ray Bursts with the ANTARES Neutrino Telescope … 1. Observing
very-high energy (VHE) 7-rays from Gamma-Ray Bursts (GRBs) can provide clues on the origin …

Dark Matter Annihilation Cross-Section Limits of Dwarf Spheroidal Galaxies with the High Altitude Water Cherenkov (HAWC) Gamma-Ray Observatory and on the …

ML Proper - 2016 - search.proquest.com
I present an indirect search for Dark Matter using the High Altitude Water Cherenkov (HAWC) gamma-ray observatory. There is significant evidence for dark matter within the known Universe, and we can set constraints on the dark matter annihilation cross-section …

A general data quality inspection for Gamma-Ray Bursts searches with HAWC

C de León, H Salazar, L Villaseñor - arXiv preprint arXiv:1708.03645, 2017 - arxiv.org
The High Altitude Water Cherenkov (HAWC) is a wide field-of-view gamma-ray observatory sensitive to gamma-rays in the 300 GeV-100 TeV energy range, located in Mexico at an altitude of 4,100 m above sea level. The detector consists of 300 Water Cherenkov Detectors …

First Light with the HAWC Gamma-Ray Observatory

S Westerhoff - The European Physical Society Conference on High …, 2014 - pos.sissa.it
The High-Altitude Water Cherenkov Gamma-Ray Observatory (HAWC) is currently under construction 4,100 meters above sea level on the slope of Pico de Orizaba, Mexico. HAWC is a large field-of-view instrument capable of continuously monitoring the gamma-ray sky …

Search for Very-High-Energy Gamma-Ray Emission from Primordial Black Holes with VERITAS

S Archambault - 2016 - veritas.sao.arizona.edu
Primordial black holes are black holes that may have formed from density fluctuations in the early universe. It has been theorized that black holes slowly evaporate. If primordial black holes of initial mass 1014g (or 10-20 times the mass of the Sun) were formed, their …

Effects Of Mass And Distance Uncertainties On Calculations Of Flux From Giant Molecular Clouds

M Coel - 2018 - digitalcommons.mtu.edu
It is assumed that the distribution of the Milky Way cosmic rays, the cosmic ray 'sea,'is even throughout the Galaxy. This assumption can be tested by measuring gamma rays produced from cosmic ray interactions with Giant Molecular Clouds. The gamma ray flux depends on …

2018ApJ...859...70F
2018/05

The Origin of the Optical Flashes: The Case Study of GRB 080319B and GRB 130427A

- Fraija, N.;
- Veres, P.

Possible GeV counterpart at the ground level associated with Fermi LAT gamma-ray bursts

CRA Augusto, CE Navia, MN de Oliveira… - Journal of Physics …, 2018 - iopscience.iop.org
Abstract From June 2014 to February 2017, the Fermi LAT detected 46 gamma-ray bursts (GRBs) with photon energies above 20 MeV, and the trigger coordinates of seven of them were within the FoV of New-Tupi detector located in the central region of the South Atlantic …
Artículos relacionados Las 7 versiones
stanford.edu

 2018NIMPA.907...31H
2018/11

Detectors for high-energy messengers from the Universe

- Hofmann, W.;
- Hinton, J.

 78
2019scta.book.....C
2019/03

Science with the Cherenkov Telescope Array

- Cherenkov Telescope Array Consortium;
- Acharya, B. S.;
- Agudo, I.
- *and 579 more*

 79
2019JPhCS1263a2003D
2019/06

Ground-based Gamma-Ray Astronomy: an Introduction

- Di Sciascio, Giuseppe

 80
2019PhRvD.100d3021B
2019/08

Combining Cherenkov and scintillation detector observations with simulations to deduce the nature of high-energy radiation excesses during thunderstorms

- Bowers, Gregory S.;
- Blaine, William;
- Shao, Xuan-Min
- *and 8 more*

 81
2019ApJ...883..162F
2019/10

Synchrotron Self-Compton as a Likely Mechanism of Photons beyond the Synchrotron Limit in GRB 190114C

- Fraija, N.;
- Barniol Duran, R.;
- Dichiara, S.
- *and 1 more*

□ 82
2020ApJ...893...77W
2020/04

A Comprehensive Statistical Study of Gamma-Ray Bursts

- Wang, Feifei;
- Zou, Yuan-Chuan;
- Liu, Fuxiang
- *and 4 more*

□ 83
2020ApJ...900...67K
2020/09

Prospective Annual Detection Rate of High-energy Gamma-Ray Bursts with LHAASO-WCDA

- Kang, Ming-Ming;
- Qiao, Bing-Qiang;
- Yao, Yu-Hua
- *and 3 more*

□ 84
2020ApJ...905...73A
2020/12

Interplanetary Magnetic Flux Rope Observed at Ground Level by HAWC

- Akiyama, S.;
- Alfaro, R.;
- Alvarez, C.
- *and 59 more*

□ 85
2020ApJ...905..112F
2020/12

GRB Fermi-LAT Afterglows: Explaining Flares, Breaks, and Energetic Photons

- Fraija, N.;
- Laskar, T.;
- Dichiara, S.

- *and 4 more*

□ 86
2021EPJC...81...80C
2021/01

New methods to reconstruct Xmax and the energy of gamma-ray air showers with high accuracy in large wide-field observatories

- Conceição, R.;
- Peres, L.;
- Pimenta, M.
- *and 1 more*

□ 87
2021GeoRL..4890033B
2021/03

Fair Weather Neutron Bursts From Photonuclear Reactions by Extensive Air Shower Core Interactions in the Ground and Implications for Terrestrial Gamma ray Flash Signatures

- Bowers, Gregory S.;
- Shao, Xuan-Min;
- Blaine, William
- *and 24 more*

□ 88
2021SoPh..296...89A
2021/06

HAWC as a Ground-Based Space-Weather Observatory

- Alvarez, C.;
- Angeles Camacho, J. R.;
- Arteaga-Velázquez, J. C.
- *and 67 more*

□ 89
2021PhRvD.104b3022A
2021/07

Decaying dark matter in dwarf spheroidal galaxies: Prospects for x-ray and gamma-ray telescopes

- Ando, Shin'ichiro;
- Barik, Suvendu K.;
- Feng, Zhuoran
- *and 12 more*

□ 90
2021arXiv211112053C
2021/11

On the origin of particle bursts observed by arrays of particle detectors

- Chilingarian, Ashot;
- Hovsepyan, Gagik

□ 91
2021JCAP...12..051C
2021/12

Evaporating primordial black holes in gamma ray and neutrino telescopes

- Capanema, Antonio;
- Esmaeili, AmirFarzan;
- Esmaili, Arman

□ 92
2021Univ....7..503N
2021/12

Gamma-ray Bursts at the Highest Energies

- Nava, Lara

□ 93
2022EPJST.231....3B
2022/01

Ground-based gamma-ray astronomy: history and development of techniques

- Bose, D.;
- Chitnis, V. R.;
- Majumdar, P.
- *and 1 more*

□ 94
2022hxga.book...21D

Detecting Gamma-Rays with Moderate Resolution and Large Field of View: Particle Detector Arrays and Water Cherenkov Technique

- DuVernois, Michael A.;
- Di Sciascio, Giuseppe

□ 95
2022ChPhC..46c0003W
2022/03

Chapter 3 Extra-galactic gamma-ray sources

- Wang, Xiang-Yu;
- Bi, Xiao-Jun;
- Cao, Zhen
- *and 4 more*

□ 96
2022ApJ...932...80Y
2022/06

GeV Signatures of Short Gamma-Ray Bursts in Active Galactic Nuclei

- Yuan, Chengchao;
- Murase, Kohta;
- Guetta, Dafne
- *and 3 more*

□ 97
2022JInst..17P7022C
2022/07

Multi-messenger observations of thunderstorm-related bursts of cosmic rays

- Chilingarian, A.;
- Hovsepyan, G.;
- Karapetyan, T.
- *and 5 more*

□ 98
2022Univ....8..373T
2022/07

Key Space and Ground Facilities in GRB Science

- Tsvetkova, Anastasia;
- Svinkin, Dmitry;
- Karpov, Sergey
- *and 1 more*

□ 99
2022ApJ...936..126A
2022/09

Constraints on the Very High Energy Gamma-Ray Emission from Short GRBs with HAWC

- Albert, A.;
- Alfaro, R.;
- Alvarez, C.
- *and 87 more*

 100
2022NewA...9701871C
2022/11

The synergy of the cosmic ray and high energy atmospheric physics: Particle bursts observed by arrays of particle detectors

- Chilingarian, A.;
- Hovsepyan, G

2023Atmos..14..300C
2023/02

Thunderstorm Ground Enhancements Measured on Aragats and Progress of High-Energy Physics in the Atmosphere

- Chilingarian, Ashot

 102
2023arXiv230706467B
2023/07

Searching for Exploding Black Holes

- Boluna, Xavier;
- Profumo, Stefano;
- Blé, Juliette
- and 1 more

 103
2023JHEAp..39....1P
2023/08

Sensitivity to point-like sources of the ALTO atmospheric particle detector array, designed for 200 GeV-50 TeV γ-ray astronomy

- Punch, M.;
- Senniappan, M.;
- Becherini, Y.

- and 4 more

□ 104
2023arXiv231009783C
2023/10

Extensive air showers and atmospheric electric fields. Synergy of Space and atmospheric particle accelerators

- Chilingarian, A.

The spatial distributions of the sources of UV solar Explosive Events at different velocities

Mendoza-Torres J.E., Advances of Space Research, Volume 51, January 2013, Pages 76-86
No Citations

Millimeter and Submillimeter Counterparts of the 2009 September 26 Solar Promience

J. E. Pérez-León, D. Hiriart y E. Mendoza-Torres, RevMexAA, vol. 49, 1, 2013.
Citations A1 B1

Solar science with the Atacama large millimeter/submillimeter array—a new view of our Sun

S Wedemeyer, T Bastian, R Brajša, H Hudson… - Space science …, 2016 - Springer

Abstract The Atacama Large Millimeter/submillimeter Array (ALMA) is a new powerful tool for observing the Sun at high spatial, temporal, and spectral resolution. These capabilities can address a broad range of fundamental scientific questions in solar physics. The radiation …

Synthetic Radio Views of Simulated Solar Flux Ropes

AA Kuznetsov, R Keppens, C Xia - Solar Physics, 2016 - Springer

We produce synthetic radio views of simulated flux ropes in the solar corona, where finite-β \upbeta magnetohydrodynamic (MHD) simulations serve to mimic the flux-rope formation stages, as well as their stable endstates. These endstates represent twisted flux ropes where

Circular Aperture Slot Antenna With Common-Mode Rejection Filter Based on Defected Ground Structures or Broad Band

E. Colin-Beltran, A. Corona-Chavez, T. Itoh, and J.E. Mendoza-Torres, , IEEE Transactions on Antennas and Propagation, 61, 2425, 2013

Citations A11 B3

Optimization of the return loss of differentially fed microstrip patch antenna using ANN and firefly algorithm

R Kaur, M Rattan - Wireless Personal Communications, 2015 - Springer
The microstrip patch antenna that have more than two feed points or lines is known as differential fed microstrip patch antenna. In this paper, firefly algorithm (FA) and artificial neural network (ANN) has been applied to a 'Flower'shaped differentially fed microstrip …
Citado por 11 Artículos relacionados Las 5 versiones
[PDF] inaoep.mx

Dielectric properties of beans at ultra-wide band frequencies

R Torrealba-Meléndez, ME Sosa-Morales… - Journal of Microwave …, 2014 - Taylor & Francis
Dielectric properties of three varieties of common beans (Phaseolus vulgaris L.) were determined at Ultra-Wideband (UWB) frequencies (3–10.6 GHz) using a free space transmission method. Beans were conditioned to get different moisture contents; the bulk …
Citado por 3 Artículos relacionados Las 4 versiones
[PDF] ieee.org

Design of dualband antenna with improved gain and bandwidth using defected ground structure

P Shilpi, D Upadhyay… - 2016 3rd International …, 2016 - ieeexplore.ieee.org
A dual-frequency microstrip line-fed planar microstrip antenna for multiband operation is proposed using defected ground structure (DGS). This antenna has a rectangular patch with rectangular-shaped strips cut in ground and is fed by a microstrip line, for achieving …
Citado por 2 Artículos relacionados
[PDF] ieee.org

Compact wideband balanced filter for eliminating radio-frequency interference on differentially-fed antennas

YC Tseng, PY Weng, TL Wu - 2015 IEEE International …, 2015 - ieeexplore.ieee.org
For compact wireless devices, radio-frequency interference (RFI) usually occurs when the common-mode (CM) noises from digital cirucits couple to differentially-fed antennas (DFAs). To tackle this problem, a wideband balanced filter with high-level CM suppression is …
Citado por 2 Artículos relacionados Las 2 versiones
[PDF] ieee.org

A novel microstrip slot antenna for permittivity measurement

B Jackson, T Jayanthy - International Conference on …, 2014 - ieeexplore.ieee.org
A compact Microstrip slot antenna is designed for 2.4 GHz frequency and presented in this paper. The proposed antenna structure has multiple slots. The designed antenna is fabricated using FR4 substrate with 1mm thickness. This antenna has been implemented as …
Citado por 2 Artículos relacionados Las 3 versiones
[PDF] wiley.com

Novel common mode suppression network for the transformation of single-ended to balanced filters

JE Peláez, JL Olvera-Cervantes… - Microwave and …, 2016 - Wiley Online Library
ABSTRACT A novel method to obtain balanced structures is introduced. The balanced behavior of a single-ended structure is achieved by combining two stages of the single-ended device, by means of a new common mode suppression network (CMSN). As an …
Citado por 1 Artículos relacionados Las 2 versiones

Balanced-to-balanced dual-band bandpass filter with common-mode rejection spurious suppression and independent bands

JA Escobar-Peláez, JL Olvera-Cervantes… - Journal of …, 2015 - Taylor & Francis
A novel balanced-to-balanced dual-band bandpass filter is presented. The structure is obtained by combining two single-layer balanced-to-balanced bandpass filters (BBPF) with microstrip lines. Characteristics of each band can be designed independently. The final …
Citado por 1 Artículos relacionados Las 3 versiones
[PDF] uanl.mx

[PDF] Propiedades dieléctricas de maíz mexicano

RT Meléndez, MES Morales, JLO Cervantes… - …, 2014 - ingenierias.uanl.mx
En este trabajo se determinaron y analizaron las propiedades dieléctricas de tres variedades de maíz mexicano (blanco, azul y amarillo) con diferente humedad en el rango de banda ultra ancha (Ultra-Wide Band, UWB), de 3 a 10.5 GHz, utilizando el método de …
Artículos relacionados Las 2 versiones
[PDF] thapar.edu

Investigation of Microstrip Patch Antenna Using Defected Ground Structure for Wireless Applications

G Singh, JG Kaur - 2014 - tudr.thapar.edu
Wireless communications have been developed widely and rapidly in the modern world especially during the last two decades. The future development of the personal communication devices will aim to provide image, speech and data communications at any …
Artículos relacionados
[HTML] scielo.org.mx

Novel balanced diplexer with band design flexibility

A Corona-Chavez, TK Kataria… - Revista mexicana de …, 2016 - scielo.org.mx
In this paper a novel differential mode diplexer is presented. This circuit allows complete design independence between both bands. It will be shown that the diplexer can be designed to provide single-ended or differential outputs while having a differential input. All

OH Maser Sources in W49N: Probing Magnetic Field and Differential Anisotropic Scattering with Zeeman pairs using the VLBA

A.A. Deshpande, W. M. Goss, and J. E. Mendoza-Torres, ApJ, 775, 36, 2013

Citations A2 B1
 2024IAUS..380..238S
2024

Fine structure and refractive scattering of the H_2O maser in star-forming region W49N

- Shakhvorostova, N. N.;
- Moran, J. M.;
- Alakoz, A. V.
- *and 3 more*

 2
2023A&A...669A.100M
2023/01

Global kinematics study of OH masers in W49N

- Mendoza-Torres, J. E.;
- Juárez-Gama, M.;
- Rodríguez-Esnard, I. T.

 3
2016A&A...585A..76W
2016/01

Far-infrared study of tracers of oxygen chemistry in diffuse clouds

- Wiesemeyer, H.;
- Güsten, R.;
- Heyminck, S.

Investigation of the Transient Cosmic-Ray Decreases Observed by Voyagers in 2007: a Numerical Approach

Journal of Geophysical Research - Space Physics, 118, 7517-7524, Luo X., Zhang M., Feng, X. and Mendoza-Torres J.E.
doi:10.1002/2013JA019218, 2013
A5 B1 citast6

A+1 B+0 P95

Citations A 6 B1

New insights from modeling the neutral heliospheric current sheet

JL Raath, RD Strauss, MS Potgieter - Astrophysics and Space Science, 2015 - Springer
Recently, the modulation of cosmic rays in the heliosphere has increasingly been studied by solving the well known transport equation via an approach based on stochastic differential equations. This approach, which is now well-established and published, allows for an in …

Citado por 8 Artículos relacionados Las 8 versiones
[PDF] nwu.ac.za

A comparative study of cosmic ray modulation models

JL Raath - 2015 - repository.nwu.ac.za
Until recently, numerical modulation models for the solar modulation of cosmic rays have been based primarily on finite difference approaches; however, models based on the solution of an appropriate set of stochastic differential equations have become increasingly …
Citado por 5 Artículos relacionados Las 2 versiones
[PDF] nwu.ac.za

The effect of magnetic field modifications on the modulation of cosmic rays in the heliosphere

JL Raath, MS Potgieter, RD Strauss, A Kopp - arXiv preprint arXiv …, 2015 - arxiv.org
A numerical model for the solar modulation of cosmic rays, based on the solution of a set of stochastic differential equations, is used to illustrate the effects of modifying the heliospheric magnetic field, particularly in the polar regions of the heliosphere. To this end, the dfferences …
Citado por 3 Artículos relacionados Las 2 versiones
[PDF] researchgate.net

[PDF] Investigation into how the solar modulation of cosmic rays is effected by modifications to the heliospheric magnetic field

JL Raath, MS Potgieter, RD Strauss, A Kopp - 2015 - researchgate.net
A numerical model for the solar modulation of cosmic rays, based on the solution of a set of stochastic differential equations, is used to illustrate the effects of modifying the heliospheric magnetic field, particularly in the polar regions of the heliosphere. To this end, the …
Artículos relacionados Las 2 versiones
[PDF] nwu.ac.za

Modeling of electrons in the heliosphere

RR Nndanganeni - 2016 - repository.nwu.ac.za
The propagation and modulation of electrons in the heliosphere play an important part in improving our understanding and assessment of the processes of solar modulation. A locally developed, full three-dimensional, numerical model is used to study the modulation of …
Citado por 3 Artículos relacionados
[PDF] arxiv.org

A study of Electron Forbush decreases with a 3D SDE numerical model

X Luo, MS Potgieter, M Zhang… - The Astrophysical …, 2018 - iopscience.iop.org
Because of the precise measurements of the cosmic ray electron flux by the PAMELA and AMS02, Electron Forbush decreases (Fds) have recently been observed for the first time. This serves as motivation to perform a numerical study of electron Forbush decreases with …
Artículos relacionados Las 5 versiones

2021ApJ...920L..43A
2021/10

Observations of Forbush Decreases of Cosmic-Ray Electrons and Positrons with the Dark Matter Particle Explorer

- Alemanno, Francesca;
- An, Qi;
- Azzarello, Philipp

Observation of Small-scale Anisotropy in the Arrival Direction Distribution of TeV Cosmic Rays with HAWC

Abeysekara, A. U.; Alfaro, R.; Alvarez, C.; y la colaboración HAWC, ApJ, 796, 108, 2014.

Citations A38 B24

Radio detection of cosmic-ray air showers and high-energy neutrinos

FG Schröder - Progress in Particle and Nuclear Physics, 2017 - Elsevier
In the last fifteen years radio detection made it back to the list of promising techniques for extensive air showers, firstly, due to the installation and successful operation of digital radio experiments and, secondly, due to the quantitative understanding of the radio emission from …
Citado por 75 Artículos relacionados Las 6 versiones
[PDF] arxiv.org

Anisotropy in cosmic-ray arrival directions in the southern hemisphere based on six years of data from the IceCube detector

MG Aartsen, K Abraham, M Ackermann… - The Astrophysical …, 2016 - iopscience.iop.org
In the last few decades, a number of experiments have provided long-term, statistically significant evidence of a faint sidereal anisotropy in the cosmic-ray arrival direction distribution across six orders of magnitude in energy, from tens of GeV to tens of PeV. The …
Citado por 45 Artículos relacionados Las 19 versiones
[PDF] unito.it

Argo-ybj observation of the large-scale cosmic ray anisotropy during the solar minimum between cycles 23 and 24

B Bartoli, P Bernardini, XJ Bi, Z Cao… - The Astrophysical …, 2015 - iopscience.iop.org
This paper reports on the measurement of the large-scale anisotropy in the distribution of cosmic-ray arrival directions using the data collected by the air shower detector ARGO-YBJ from 2008 January to 2009 December, during the minimum of solar activity between cycles …
Citado por 35 Artículos relacionados Las 13 versiones
[PDF] aps.org

Deciphering the dipole anisotropy of galactic cosmic rays

M Ahlers - Physical review letters, 2016 - APS
Recent measurements of the dipole anisotropy in the arrival directions of Galactic cosmic rays (CRs) indicate a strong energy dependence of the dipole amplitude and phase in the TeV–PeV range. We argue here that these observations can be well understood within …
Citado por 33 Artículos relacionados Las 8 versiones
[PDF] arxiv.org

Origin of small-scale anisotropies in Galactic cosmic rays

M Ahlers, P Mertsch - Progress in Particle and Nuclear Physics, 2017 - Elsevier
The arrival directions of Galactic cosmic rays are highly isotropic. This is expected from the presence of turbulent magnetic fields in our Galactic environment that repeatedly scatter charged cosmic rays during propagation. However, various cosmic ray observatories have …
Citado por 30 Artículos relacionados Las 7 versiones
[PDF] arxiv.org

Indirect dark matter searches in gamma and cosmic rays

J Conrad, O Reimer - Nature Physics, 2017 - nature.com
Dark matter candidates such as weakly interacting massive particles are predicted to annihilate or decay into Standard Model particles, leaving behind distinctive signatures in gamma rays, neutrinos, positrons, antiprotons, or even antinuclei. Indirect dark matter …
Citado por 25 Artículos relacionados Las 6 versiones
[PDF] escholarship.org

Search for very high-energy gamma rays from the northern Fermi bubble region with HAWC

AU Abeysekara, A Albert, R Alfaro… - The Astrophysical …, 2017 - iopscience.iop.org
We present a search for very high-energy gamma-ray emission from the Northern Fermi Bubble region using data collected with the High Altitude Water Cherenkov gamma-ray observatory. The size of the data set is 290 days. No significant excess is observed in the …
Citado por 25 Artículos relacionados Las 9 versiones
[PDF] arxiv.org

A new maximum-likelihood technique for reconstructing cosmic-ray anisotropy at all angular scales

M Ahlers, SY BenZvi, P Desiati… - The Astrophysical …, 2016 - iopscience.iop.org
The arrival directions of TeV–PeV cosmic rays show weak but significant anisotropies with relative intensities at the level of one per mille. Due to the smallness of the anisotropies, quantitative studies require careful disentanglement of detector effects from the observation …
Citado por 21 Artículos relacionados Las 9 versiones
[PDF] arxiv.org

Cosmic ray transport with magnetic focusing and the "telegraph" model

MA Malkov, RZ Sagdeev - The Astrophysical Journal, 2015 - iopscience.iop.org

Cosmic rays (CR), constrained by scattering on magnetic irregularities, are believed to propagate diffusively. However, a well-known defect of diffusive approximation, whereby some of the particles propagate unrealistically fast, has directed interest toward an …
Citado por 20 Artículos relacionados Las 11 versiones
[PDF] arxiv.org

Progress in high-energy cosmic ray physics

S Mollerach, E Roulet - Progress in Particle and Nuclear Physics, 2018 - Elsevier
We review some of the recent progress in our knowledge about high-energy cosmic rays, with an emphasis on the interpretation of the different observational results. We discuss the effects that are relevant to shape the cosmic ray spectrum and the explanations proposed to …
Citado por 20 Artículos relacionados Las 5 versiones

Structure of the heliotail from interstellar boundary explorer observations: implications for the 11-year solar cycle and pickup ions in the heliosheath

EJ Zirnstein, J Heerikhuisen, GP Zank… - The Astrophysical …, 2017 - iopscience.iop.org
Abstract Interstellar Boundary Explorer (IBEX) measurements of energetic neutral atoms (ENAs) from the heliotail show a multi-lobe structure of ENA fluxes as a function of energy between~ 0.71 and 4.29 keV. Below~ 2 keV, there is a single structure of enhanced ENA …
Citado por 20 Artículos relacionados Las 5 versiones
[PDF] arxiv.org

Small-scale anisotropies of cosmic rays from relative diffusion

M Ahlers, P Mertsch - The Astrophysical Journal Letters, 2015 - iopscience.iop.org
The arrival directions of multi-TeV cosmic rays show significant anisotropies at small angular scales. It has been argued that this small-scale structure can naturally arise from cosmic ray scattering in local turbulent magnetic fields that distort a global dipole anisotropy set by …
Citado por 20 Artículos relacionados Las 7 versiones
[PDF] arxiv.org

Cosmic-Ray Small-scale Anisotropies and Local Turbulent Magnetic Fields

V López-Barquero, R Farber, S Xu… - The Astrophysical …, 2016 - iopscience.iop.org
Cosmic-ray anisotropy has been observed in a wide energy range and at different angular scales by a variety of experiments over the past decade. However, no comprehensive or satisfactory explanation has been put forth to date. The arrival distribution of cosmic rays at …
Citado por 17 Artículos relacionados Las 9 versiones
[PDF] aps.org

All-particle cosmic ray energy spectrum measured by the HAWC experiment from 10 to 500 TeV

R Alfaro, C Alvarez, JD Álvarez, R Arceo… - Physical Review D, 2017 - APS
We report on the measurement of the all-particle cosmic ray energy spectrum with the High Altitude Water Cherenkov (HAWC) Observatory in the energy range 10 to 500 TeV. HAWC is a ground-based air-shower array deployed on the slopes of Volcan Sierra Negra in the state …

Citado por 13 Artículos relacionados Las 11 versiones
[PDF] iop.org

Cosmic ray confinement and transport models for probing their putative sources

MA Malkov - Physics of Plasmas, 2015 - aip.scitation.org
Recent efforts in cosmic ray (CR) confinement and transport theory are discussed. Three problems are addressed as being crucial for understanding the present day observations and their possible telltale signs of the CR origin. The first problem concerns CR behavior …
Citado por 8 Artículos relacionados Las 10 versiones
[PDF] arxiv.org

The needle in the hundred square degree haystack: The hunt for binary neutron star mergers with LIGO and Palomar Transient Factory

LP Singer - arXiv preprint arXiv:1501.03765, 2015 - arxiv.org
The Advanced LIGO and Virgo experiments are poised to detect gravitational waves (GWs) directly for the first time this decade. The ultimate prize will be joint observation of a compact binary merger in both gravitational and electromagnetic channels. However, GW sky …
Citado por 6 Artículos relacionados Las 9 versiones
[PDF] arxiv.org

The cosmic ray anisotropy below 10^{15} eV

GD Sciascio - ASTRA Proceedings, 2015 - astra-proc.net
The measurement of the anisotropy in the cosmic ray (CR) arrival direction distribution provides important informations on the propagation mechanisms and on the identification of their sources. In the last decade the anisotropy came back to the attention of the scientific …
Citado por 4 Artículos relacionados Las 6 versiones
[PDF] aps.org

Comic ray flux anisotropies caused by astrospheres

K Scherer, RD Strauss, SES Ferreira, H Fichtner - Astroparticle Physics, 2016 - Elsevier
Huge astrospheres or stellar wind bubbles influence the propagation of cosmic rays at energies up to the TeV range and can act as small-scale sinks decreasing the cosmic ray flux. We model such a sink (in 2D) by a sphere of radius 10 pc embedded within a sphere of …
Citado por 4 Artículos relacionados Las 9 versiones
[HTML] springer.com

[HTML] Measurement of the large-scale anisotropy of cosmic rays in the PAMELA experiment

AV Karelin, O Adriani, GC Barbarino, GA Bazilevskaya… - JETP Letters, 2015 - Springer
Large-scale anisotropy or so-called sidereal-diurnal wave has been detected in the PAMELA satellite experiment in the time interval of 2006–2014. The magnitude of anisotropy has been measured simultaneously for the Southern and Northern Hemispheres in the …

Citado por 4 Artículos relacionados Las 8 versiones
[PDF] arxiv.org

Cosmic-Ray Anisotropies: A Review

O Deligny - arXiv preprint arXiv:1612.08002, 2016 - arxiv.org
Important observational results have been recently reported on the angular distributions of cosmic rays (CRs) at all energies, calling into question the perception of CRs a decade ago. These results together with their in-progress interpretations are summarized in this short …
Citado por 4 Artículos relacionados Las 4 versiones
[PDF] arxiv.org

TeV Cosmic-Ray Anisotropy from the Magnetic Field at the Heliospheric Boundary

V López-Barquero, S Xu, P Desiati… - The Astrophysical …, 2017 - iopscience.iop.org
We performed numerical calculations to test the suggestion by Desiati and Lazarian that the anisotropies of TeV cosmic rays may arise from their interactions with the heliosphere. For this purpose, we used a magnetic field model of the heliosphere and performed direct …
Citado por 3 Artículos relacionados Las 8 versiones
[PDF] inspirehep.net

[PDF] Measurement of the iron spectrum in cosmic rays with the VERITAS experiment

H Fleischhack - 2017 - inspirehep.net
More than a hundred years after their discovery, a lot is already known about cosmic rays. Still, there are many open questions: How does their composition change with energy? Which types of sources dominate in different energy ranges? How long do cosmic rays …
Citado por 3 Artículos relacionados Las 6 versiones

Explaining TeV cosmic-ray anisotropies with non-diffusive cosmic-ray propagation

JP Harding, CL Fryer, S Mendel - The Astrophysical Journal, 2016 - iopscience.iop.org
Constraining the behavior of cosmic ray data observed at Earth requires a precise understanding of how the cosmic rays propagate in the interstellar medium. The interstellar medium is not homogeneous; although turbulent magnetic fields dominate over large …
Citado por 6 Artículos relacionados Las 8 versiones

The Heliosphere as Seen in TeV Cosmic Rays

M Zhang, NV Pogorelov - 2016 - repository.lib.fit.edu
Measurements from several cosmic-ray air shower experiments reveal that the anisotropy of TeV cosmic-ray flux does not agree with a dipole pattern commonly expected from the Compton-Getting effect or from the diffusion of cosmic rays in Galactic magnetic fields. TeV …
Citado por 5 Artículos relacionados Las 5 versiones

Altitude survey of the galactic cosmic ray flux with a Mini Neutron Monitor

A Lara, A Borgazzi, R Caballero-Lopez - Advances in Space Research, 2016 - Elsevier
We present the results of a survey of the galactic cosmic ray (GCR) flux measured at different altitudes, from the sea level, up to~ 4600 m asl This altitude survey was carried out with a "Mini" Neutron Monitor (MNM), and performed inside a small area of the central part of …
Citado por 5 Artículos relacionados Las 3 versiones
[PDF] arxiv.org

A search for dark matter in the Galactic halo with HAWC

AU Abeysekara, A Albert, R Alfaro… - … of Cosmology and …, 2018 - iopscience.iop.org
Abstract The High Altitude Water Cherenkov (HAWC) gamma-ray observatory is a wide field-of-view observatory sensitive to 500 GeV–100 TeV gamma rays and cosmic rays. With its observations over 2/3 of the sky every day, the HAWC observatory is sensitive to a wide …
Citado por 9 Artículos relacionados Las 8 versiones
[PDF] arxiv.org

Observation of Anisotropy of TeV Cosmic Rays with Two Years of HAWC

AU Abeysekara, R Alfaro, C Alvarez… - The Astrophysical …, 2018 - iopscience.iop.org
After two years of operation, the High-Altitude Water Cherenkov (HAWC) Observatory has analyzed the TeV cosmic-ray sky over an energy range between 2.0 and 72.8 TeV. Like other detectors in the northern and southern hemispheres, HAWC observes an energy …
Citado por 8 Artículos relacionados Las 7 versiones
[PDF] arxiv.org

Astrophysical neutrinos and cosmic rays observed by IceCube

MG Aartsen, M Ackermann, J Adams, JA Aguilar… - Advances in Space …, 2018 - Elsevier
The core mission of the IceCube neutrino observatory is to study the origin and propagation of cosmic rays. IceCube, with its surface component IceTop, observes multiple signatures to accomplish this mission. Most important are the astrophysical neutrinos that are produced in …
Citado por 8 Artículos relacionados Las 17 versiones
[PDF] arxiv.org

Selected Topics in Cosmic Ray Physics

R Aloisio, P Blasi, I De Mitri, S Petrera - Multiple Messengers and …, 2018 - Springer
The search for the origin of cosmic rays is as active as ever, mainly driven by new insights provided by recent pieces of observation. Much effort is being channelled in putting the so-called supernova paradigm for the origin of galactic cosmic rays on firmer grounds, while at …
Citado por 4 Artículos relacionados Las 7 versiones
[PDF] astra-proc.netFull View

First HAWC observations of the Sun constrain steady TeV gamma-ray emission

A Albert, R Alfaro, C Alvarez, R Arceo… - Physical Review D, 2018 - APS
Steady gamma-ray emission up to at least 200 GeV has been detected from the solar disk in the Fermi-LAT data, with the brightest, hardest emission occurring during solar minimum. The likely cause is hadronic cosmic rays undergoing collisions in the Sun's atmosphere after …
Citado por 4 Artículos relacionados Las 9 versiones
[PDF] arxiv.org

Measurements and implications of cosmic ray anisotropies from TeV to trans-EeV energies

O Deligny - Astroparticle Physics, 2018 - Elsevier
Important observational results have been recently reported on the angular distributions of cosmic rays at all energies, calling into question the perception of cosmic rays a decade ago. These results together with their in-progress interpretations are summarised in this …
Citado por 2 Artículos relacionados Las 6 versiones
[PDF] arxiv.org

A Search for Cosmic-ray Proton Anisotropy with the Fermi Large Area Telescope

M Meehan, J Vandenbroucke - arXiv preprint arXiv:1708.07796, 2017 - arxiv.org
In eight years of operation, the Fermi Large Area Telescope (LAT) has detected a large sample of cosmic-ray protons. The LAT's wide field of view and full-sky coverage make it an excellent instrument for studying anisotropy in the arrival directions of protons at all angular …
Citado por 2 Artículos relacionados Las 4 versiones
[PDF] mtu.edu

Search for High-Energy Gamma Rays in the Northern Fermi Bubble Region with the HAWC Observatory

HA Ayala Solares - 2017 - digitalcommons.mtu.edu
Gamma-ray astronomy is the study of very energetic photons, from E= mec 2= 0.5 x10 6 eV to> 10 20 eV. Due to the large span of the energy range, the field focuses on non-thermal processes that include the acceleration and propagation of relativistic particles, which can …
Citado por 2 Artículos relacionados Las 4 versiones
[PDF] aps.org

Constraining the ratio in TeV cosmic rays with observations of the Moon shadow by HAWC

AU Abeysekara, A Albert, R Alfaro, C Alvarez… - Physical Review D, 2018 - APS
An indirect measurement of the antiproton flux in cosmic rays is possible as the particles undergo deflection by the geomagnetic field. This effect can be measured by studying the deficit in the flux, or shadow, created by the Moon as it absorbs cosmic rays that are headed …
Citado por 2 Artículos relacionados Las 6 versiones

[PDF] arxiv.org

Application of Bayesian neural networks to energy reconstruction in EAS experiments for ground-based TeV astrophysics

Y Bai, Y Xu, J Pan, JQ Lan, WW Gao - Journal of Instrumentation, 2016 - iopscience.iop.org
A toy detector array is designed to detect a shower generated by the interaction between a TeV cosmic ray and the atmosphere. In the present paper, the primary energies of showers detected by the detector array are reconstructed with the algorithm of Bayesian neural …
Citado por 1 Artículos relacionados Las 7 versiones
[PDF] arxiv.org

Full-Sky Analysis of Cosmic-Ray Anisotropy with IceCube and HAWC

HAWC Collaboration, IceCube Collaboration - arXiv preprint arXiv …, 2015 - arxiv.org
During the past two decades, experiments in both the Northern and Southern hemispheres have observed a small but measurable energy-dependent sidereal anisotropy in the arrival direction distribution of galactic cosmic rays. The relative amplitude of the anisotropy is …
Citado por 1 Artículos relacionados Las 3 versiones
[PDF] mtu.edu

Search for TeV gamma-ray sources in the galactic plane with the HAWC observatory

H Zhou - 2015 - digitalcommons.mtu.edu
Cosmic rays, with an energy density of $\sim1\,\text {eV}\,\text {cm}^{-3} $, play an important role in the evolution of our Galaxy. Very high energy (TeV) gamma rays provide unique information about the acceleration sites of Galactic cosmic rays. The High Altitude Water …
Citado por 1 Artículos relacionados Las 4 versiones
[PDF] arxiv.org

All-sky Measurement of the Anisotropy of Cosmic Rays at 10 TeV and Mapping of the Local Interstellar Magnetic Field

AU Abeysekara, R Alfaro, C Alvarez… - The Astrophysical …, 2019 - iopscience.iop.org
The American Astronomical Society (AAS), established in 1899 and based in Washington, DC, is the major organization of professional astronomers in North America. Its membership of about 7,000 individuals also includes physicists, mathematicians, geologists, engineers …
Citado por 1 Artículos relacionados Las 8 versiones
[PDF] inspirehep.net

Understanding the anisotropy of cosmic rays at TeV and PeV energies

M Pohl, R Rettig - PoS, 2015 - inspirehep.net
The anisotropy in cosmic-ray arrival directions in the TeV-PeV energy range shows both large and small-scale structures. While the large-scale anisotropy may arise from diffusive propagation of cosmic rays, the origin of the small-scale structures remains unclear. We …
Citado por 1 Artículos relacionados Las 3 versiones
[PDF] sissa.it

[PDF] Full-Sky Analysis of Cosmic-Ray Anisotropy with IceCube and HAWC

JC Diaz Velez, DW Fiorino, P Desiati… - The 34th International …, 2016 - pos.sissa.it
Over the last few decades, several studies have measured appreciable variation in the intensity of cosmic rays of medium and high energies as a function of right ascension. An anisotropy with an amplitude of 10− 4 was first observed at energies of order 1 TeV by a …
Citado por 1 Artículos relacionados Las 4 versiones

Surveying the TeV sky with HAWC

RJ Lauer - arXiv preprint arXiv:1509.07561, 2015 - arxiv.org
The High altitude Water Cherenkov (HAWC) Observatory has been completed and began full operation in early 2015. Located at an elevation of 4,100 m near the Sierra Negra volcano in the state of Puebla, Mexico, HAWC consists of 300 water tanks instrumented with …
Citado por 1 Artículos relacionados Las 4 versiones
[PDF] umd.edu

Measurement of the cosmic-ray proton spectrum from 54 GeV to 9.5 TeV with the Fermi Large Area Telescope

DM Green - 2016 - drum.lib.umd.edu
Cosmic rays are a near-isotropic continuous flux of energetic particles of extraterrestrial origin. First discovered in 1912, cosmic rays span over 10 decades of energy and originate from Galactic and extragalactic sources. The Fermi Gamma-ray Space Telescope …
Citado por 1 Artículos relacionados Las 4 versiones
[PDF] arxiv.org

Search for Very High Energy Gamma Rays from the Northern Bubble Region with HAWC

AU Abeysekara, A Albert, R Alfaro, C Alvarez… - arXiv preprint arXiv …, 2017 - arxiv.org
We present a search of very high energy gamma-ray emission from the Northern $\textit {Fermi} $ Bubble region using data collected with the High Altitude Water Cherenkov (HAWC) gamma-ray observatory. The size of the data set is 290 days. No significant excess …
Artículos relacionados
[PDF] epj-conferences.orgFull View

Cosmic Ray Astrophysics using The High Altitude Water Cherenkov (HAWC) Observatory in México

E de la Fuente, JC Díaz–Vélez… - EPJ Web of …, 2017 - epj-conferences.org
The High-Altitude Water Cherenkov (HAWC) TeV gamma–ray Observatory in México is ready to search and study gamma-ray emission regions, extremely high-energy cosmic-ray sources, and to identify transient phenomena. With a better Gamma/Hadron rejection …
Artículos relacionados Las 4 versiones
[PDF] canterbury.ac.nz

Neutrinos and Cosmic Rays Observed by IceCube

I Collaboration, MG Aartsen, M Ackermann, J Adams… - 2017 - ir.canterbury.ac.nz
The core mission of the IceCube Neutrino observatory is to study the origin and propagation of cosmic rays. IceCube, with its surface component IceTop, observes multiple signatures to accomplish this mission. Most important are the astrophysical neutrinos that are produced in …
Artículos relacionados
[PDF] uab.cat

MAGIC observations with bright Moon and their application to measuring the VHE gamma-ray spectral cut-off of the PeVatron candidate Cassiopeia A

DA Guberman - 2018 - ddd.uab.cat
Page 1. ADVERTIMENT. L'accés als continguts d'aquesta tesi queda condicionat a l'acceptació de les condicions d'ús establertes per la següent llicència Creative Commons: http://cat.creativecommons.org/?page_id=184 ADVERTENCIA. El acceso a los contenidos …
Artículos relacionados Las 2 versiones
[PDF] arxiv.org

Gamma Emission from Large Galactic Structures

H Fleischhack, HAA Solares, P Huentemeyer… - arXiv preprint arXiv …, 2017 - arxiv.org
Gamma-ray emission from large structures is useful for tracing the propagation and distribution of cosmic rays throughout our Galaxy. For example, the search for gamma-ray emission from Giant Molecular Clouds may allow us to probe the flux of cosmic rays in …
Artículos relacionados Las 5 versiones
[PDF] psu.edu

A Likelihood Search for Very High-energy Gamma-ray Bursts with the High Altitude Water Cherenkov Observatory

KS Woodle - 2015 - etda.libraries.psu.edu
Gamma-Ray bursts (GRBs) are extremely powerful transient events that occur at cosmological distances. Observations of energy spectra of GRBs can provide information about the intervening space between the burst and Earth as well as about the source itself …
Artículos relacionados Las 3 versiones
[PDF] arxiv.org

The origin of Galactic cosmic rays: challenges to the standard paradigm

S Gabici, C Evoli, D Gaggero, P Lipari… - arXiv preprint arXiv …, 2019 - arxiv.org
A critical review of the standard paradigm for the origin of Galactic cosmic rays is presented. Recent measurements of local and far-away cosmic rays reveal unexpected behaviours, which challenge the commonly accepted scenario. These recent findings are discussed …
Artículos relacionados Las 4 versiones
[PDF] iop.org

Latest news from the High Altitude Water Cherenkov Observatory

AG Muñoz, HAWC Collaboration - Journal of Physics …, 2016 - iopscience.iop.org

Abstract The High Altitude Water Cherenkov Observatory is an air shower detector designed to study very-high-energy gamma rays (~ 100 GeV to~ 100 TeV). It is located in the Pico de Orizaba National Park, Mexico, at an elevation of 4100 m. HAWC started operations since …
Artículos relacionados Las 4 versiones

Search for a very high-energy gamma-ray signal in the northern *Fermi* bubble region with HAWC

HAA Solares, HAWC Collaboration - AIP Conference Proceedings, 2017 - aip.scitation.org
In 2010, two GeV gamma-ray lobes, known as the Fermi Bubbles, were discovered in the data from The Fermi Large Area Telescope. They extend up to 55o above and below the Galactic Center, forming two regions of spectrally hard gamma-ray emission. One of the …
Artículos relacionados Las 3 versiones
[PDF] hindawi.comFull View

Capability of the HAWC Gamma-Ray Observatory for the Indirect Detection of Ultrahigh-Energy Neutrinos

H León Vargas, A Sandoval, E Belmont… - Advances in …, 2017 - hindawi.com
The detection of ultrahigh-energy neutrinos, with energies in the PeV range or above, is a topic of great interest in modern astroparticle physics. The importance comes from the fact that these neutrinos point back to the most energetic particle accelerators in the Universe …
Artículos relacionados Las 10 versiones
[PDF] iop.org

Detection and analysis of astroparticles using WCD at 2800 m asl in Quito

A Correa, S Vargas, N Vásquez… - Journal of Physics …, 2017 - iopscience.iop.org
Abstract At the Escuela Politécnica Nacional we have assembled a WCD (Water Cherenkov Detector) prototype for the LAGO (Latin American Giant Observatory) project in Ecuador. This article presents the data as well as the analysis corresponding to October, 2015. We …
Artículos relacionados Las 3 versiones
[PDF] iop.org

All-sky observations with HAWC: latest results

JC Arteaga-Velázquez… - Journal of Physics …, 2015 - iopscience.iop.org
Abstract The High Altitude Water Cherenkov (HAWC) observatory is a ground-based air-shower detector designed to study cosmic rays and gamma rays with energies from 100 GeV up to 100 TeV. HAWC simultaneously surveys 2sr of the northern sky with a high duty …
Artículos relacionados Las 4 versiones

[LIBRO] A Search for Cosmic-ray Anisotropy with the Fermi Large Area Telescope

M Meehan - 2019 - search.proquest.com
Although cosmic rays do not point back to their sources, the distribution of their arrival directions can be used to constrain propagation models, study the distribution of their sources, and probe the structure of the local interstellar environment. A small, part-per-mille …
Artículos relacionados
[PDF] unige.ch

Measurement of the carbon and oxygen fluxes and their ratio in cosmic rays with the AMS experiment on the international space station

Y Li - 2017 - archive-ouverte.unige.ch
One of the most fundamental measurements in cosmic rays is the determination of the rigidity dependent fluxes, or spectra, of primary nuclei in cosmic rays, such as H, He, C, and O. These primary nuclei are believed to be produced and accelerated by supernova. The …
Artículos relacionados
[PDF] epj-conferences.orgFull View

TeV γ-ray astronomy with ground-based air-shower arrays

MA Mostafá - EPJ Web of Conferences, 2016 - epj-conferences.org
The TeV energy band is a very exciting window into the origin of high energy cosmic radiation, particle acceleration, and the annihilation of dark matter particles. Above a few hundred GeV, ground-based experiments of very large effective areas open a new domain …
Artículos relacionados Las 5 versiones
[PDF] cern.ch

arXiv: All-Sky Measurement of the Anisotropy of Cosmic Rays at 10 TeV and Mapping of the Local Interstellar Magnetic Field

MG Aartsen, M Santander, K Meagher, F Huang… - 2018 - cds.cern.ch
We present the first full-sky analysis of the cosmic ray arrival direction distribution with data collected by the HAWC and IceCube observatories in the Northern and Southern hemispheres at the same median primary particle energy of 10 TeV. The combined sky map …
Artículos relacionados
[HTML] oup.com

Time variability of TeV cosmic ray sky map

R Kumar, N Globus, D Eichler… - Monthly Notices of the …, 2018 - academic.oup.com
The variation in the intensity of cosmic rays at small angular scales is attributed to the interstellar turbulence in the vicinity of the Solar system. We show that a turbulent origin of the small-scale structures implies that the morphology of the observed cosmic ray intensity …
Artículos relacionados Las 6 versiones
[PDF] inspirehep.net

Pristine TeV cosmic-ray anisotropy in the local interstellar medium

M Zhang, N Pogorelov - PoS, 2017 - inspirehep.net

The anisotropy in the intensity of TeV cosmic rays arriving at Earth is routinely measured by a number of air shower experiments, such as Tibet ASγ, IceCube, Super-Kamiokande, Milagro, ARGO-YBG, HAWC and many others ([1],[2],[3],[4],[5],[6],[7],[8],[9],[10]). With a large …
Artículos relacionados Las 3 versiones

Systematic Studies of Cosmic-Ray Anisotropy and Energy Spectrum with IceCube and IceTop

F McNally - 2015 - search.proquest.com
Anisotropy in the cosmic-ray arrival direction distribution has been well documented over a large energy range, but its origin remains largely a mystery. In the TeV to PeV energy range, the galactic magnetic field thoroughly scatters cosmic rays, but anisotropy at the part-per …
Artículos relacionados Las 2 versiones
[PDF] epj-conferences.orgFull View

Measuring TeV cosmic rays at the High Altitude Water Cherenkov Observatory

S BenZvi - EPJ Web of Conferences, 2015 - epj-conferences.org
The High-Altitude Water Cherenkov Observatory, or HAWC, is an air shower array designed to observe cosmic rays and gamma rays between 100 GeV and 100 TeV. HAWC, located between the peaks Sierra Negra and Pico de Orizaba in central Mexico, will be completed in …

Planar feeds for solar observations

J.E. Mendoza-Torres, E. Colín-Beltrán, A. Corona-Chávez, J.S. Palacios-Fonseca, B. Rodríguez-Pedroza, Y. E. Tlatelpa-Osorio, J.C. García-Santos, S. Sánchez-Urrieta, Solar Physics, aceptado 27 Mayo 2014. DOI 10.1007/s11207-014-0561-3

Cited times 0

The sensitivity of HAWC to high-mass dark matter annihilations

Abeysekara, A. U.; Alfaro, R.; Alvarez, C. y la colaboración HAWC, Phys. Rev. D 90, 122002 (2014)

A36 B12

A +20 B +5 P110

Citations A 56B17

Limits to dark matter annihilation cross-section from a combined analysis of MAGIC and Fermi-LAT observations of dwarf satellite galaxies

MAGIC collaboration - Journal of Cosmology and Astroparticle …, 2016 - iopscience.iop.org
We present the first joint analysis of gamma-ray data from the MAGIC Cherenkov telescopes and the Fermi Large Area Telescope (LAT) to search for gamma-ray signals from dark matter annihilation in dwarf satellite galaxies. We combine 158 hours of Segue 1 observations with …

Citado por 158 Artículos relacionados Las 14 versiones
[PDF] arxiv.org

A review of indirect searches for particle dark matter

JM Gaskins - Contemporary Physics, 2016 - Taylor & Francis
The indirect detection of dark matter annihilation and decay using observations of photons, charged cosmic rays and neutrinos offers a promising means of identifying the particle nature of this elusive component of the universe. The last decade has seen substantial …
Citado por 106 Artículos relacionados Las 11 versiones
[PDF] aps.org

Towards the final word on neutralino dark matter

J Bramante, N Desai, P Fox, A Martin, B Ostdiek… - Physical Review D, 2016 - APS
We present a complete phenomenological prospectus for thermal relic neutralinos. Including Sommerfeld enhancements to relic abundance and halo annihilation calculations, we obtain direct, indirect, and collider discovery prospects for all neutralinos with mass parameters M …
Citado por 58 Artículos relacionados Las 7 versiones
[PDF] iop.org

Gamma-ray bounds from EAS detectors and heavy decaying dark matter constraints

A Esmaili, PD Serpico - Journal of Cosmology and Astroparticle …, 2015 - iopscience.iop.org
The very high energy Galactic γ-ray sky is partially opaque in the (0.1–10) PeV energy range. In the light of the recently detected high energy neutrino flux by IceCube, a comparable very high energy γ-ray flux is expected in any scenario with a sizable Galactic …
Citado por 45 Artículos relacionados Las 11 versiones
[PDF] aps.org

Galactic neutrinos in the TeV to PeV range

M Ahlers, Y Bai, V Barger, R Lu - Physical Review D, 2016 - APS
We study the contribution of Galactic sources to the flux of astrophysical neutrinos recently observed by the IceCube Collaboration. We show that in the simplest model of homogeneous and isotropic cosmic ray diffusion in the Milky Way the Galactic diffuse …
Citado por 44 Artículos relacionados Las 8 versiones
[PDF] aps.org

Neutrino lighthouse at Sagittarius A

Y Bai, AJ Barger, V Barger, R Lu, AD Peterson… - Physical Review D, 2014 - APS
We investigate whether a subset of high-energy events observed by IceCube may be due to neutrinos from Sagittarius A*. We check both spatial and temporal coincidences of IceCube events with other transient activities of Sagittarius A*. Among the seven IceCube shower …
Citado por 38 Artículos relacionados Las 9 versiones
[PDF] aps.org

New search for monochromatic neutrinos from dark matter decay

C El Aisati, M Gustafsson, T Hambye - Physical Review D, 2015 - APS
From data recently reported from the IceCube telescope, we derive new bounds on the monochromatic neutrino signal produced from dark matter particle decays. In the few TeV to tens of TeV energy range, these bounds turn out to be better than previous limits by more …
Citado por 36 Artículos relacionados Las 5 versiones
[PDF] arxiv.org

Origin of small-scale anisotropies in Galactic cosmic rays

M Ahlers, P Mertsch - Progress in Particle and Nuclear Physics, 2017 - Elsevier
The arrival directions of Galactic cosmic rays are highly isotropic. This is expected from the presence of turbulent magnetic fields in our Galactic environment that repeatedly scatter charged cosmic rays during propagation. However, various cosmic ray observatories have …
Citado por 30 Artículos relacionados Las 7 versiones
[PDF] arxiv.org

Capture and decay of electroweak WIMPonium

P Asadi, M Baumgart, PJ Fitzpatrick… - … of Cosmology and …, 2017 - iopscience.iop.org
Abstract The spectrum of Weakly-Interacting-Massive-Particle (WIMP) dark matter generically possesses bound states when the WIMP mass becomes sufficiently large relative to the mass of the electroweak gauge bosons. The presence of these bound states …
Citado por 26 Artículos relacionados Las 9 versiones
[PDF] arxiv.org

Is the gamma-ray source 3FGL J2212. 5+ 0703 a dark matter subhalo?

B Bertoni, D Hooper, T Linden - Journal of Cosmology and …, 2016 - iopscience.iop.org
In a previous paper, we pointed out that the gamma-ray source 3FGL J2212. 5+\linebreak 0703 shows evidence of being spatially extended. If a gamma-ray source without detectable emission at other wavelengths were unambiguously determined to be spatially extended, it …
Citado por 24 Artículos relacionados Las 8 versiones

Dark Matter Limits From Dwarf Spheroidal Galaxies with The HAWC Gamma-Ray Observatory

A Albert, R Alfaro, C Alvarez, JD Álvarez… - The Astrophysical …, 2018 - iopscience.iop.org
Abstract The High Altitude Water Cherenkov (HAWC) gamma-ray observatory is a wide field of view observatory sensitive to 500 GeV–100 TeV gamma-rays and cosmic rays. It can also perform diverse indirect searches for dark matter annihilation and decay. Among the most …
Citado por 23 Artículos relacionados Las 7 versiones
[PDF] arxiv.org

Dark matter annihilation and decay searches with the High Altitude Water Cherenkov (HAWC) observatory

JP Harding, B Dingus - arXiv preprint arXiv:1508.04352, 2015 - arxiv.org

In order to observe annihilation and decay of dark matter, several types of potential sources should be considered. Some sources, such as dwarf galaxies, are expected to have very low astrophysical backgrounds but fairly small dark matter densities. Other sources, like the …
Citado por 19 Artículos relacionados Las 6 versiones
[PDF] aps.org

Dark matter decay to a photon and a neutrino: the double monochromatic smoking gun scenario

C El Aisati, M Gustafsson, T Hambye, T Scarna - Physical Review D, 2016 - APS
In the energy range from a few TeV to 25 TeV, upper bounds on the dark matter decay rate into high-energy monochromatic neutrinos have recently become comparable to those on monochromatic gamma-ray lines. This implies the clear possibility of a future double …
Citado por 18 Artículos relacionados Las 10 versiones
[PDF] arxiv.org

Thermalization time scales for WIMP capture by the Sun in effective theories

A Widmark - Journal of Cosmology and Astroparticle Physics, 2017 - iopscience.iop.org
I study the process of dark matter capture by the Sun, under the assumption of a Weakly Interacting Massive Particle (WIMP), in the framework of non-relativistic effective field theory. Hypothetically, WIMPs from the galactic halo can scatter against atomic nuclei in the solar …
Citado por 14 Artículos relacionados Las 8 versiones
[PDF] aps.org

Indirect detection of neutrino portal dark matter

B Batell, T Han, BSE Haghi - Physical Review D, 2018 - APS
We investigate the feasibility of the indirect detection of dark matter in a simple model using the neutrino portal. The model is very economical, with right-handed neutrinos generating neutrino masses through the type-I seesaw mechanism and simultaneously mediating …
Citado por 13 Artículos relacionados Las 7 versiones
[PDF] arxiv.org

Novel gamma-ray signatures of PeV-scale dark matter

C Blanco, JP Harding, D Hooper - Journal of Cosmology and …, 2018 - iopscience.iop.org
The gamma-ray annihilation and decay products of very heavy dark matter particles can undergo attenuation through pair production, leading to the development of electromagnetic cascades. This has a significant impact not only on the spectral shape of the gamma-ray …
Citado por 10 Artículos relacionados Las 7 versiones
[PDF] arxiv.org

First limits on the dark matter cross section with the HAWC Observatory

ML Proper, JP Harding, B Dingus - arXiv preprint arXiv:1508.04470, 2015 - arxiv.org
The High Altitude Water Cherenkov (HAWC) gamma-ray observatory is a wide field-of-view observatory sensitive to 100 GeV-100 TeV gamma rays and cosmic rays. The HAWC observatory is also sensitive to diverse indirect searches for dark matter annihilation …
Citado por 10 Artículos relacionados Las 6 versiones

[PDF] aps.org

Black Hole Window into -Wave Dark Matter Annihilation

J Shelton, SL Shapiro, BD Fields - Physical review letters, 2015 - APS
We present a new method to measure or constrain p-wave-suppressed cross sections for dark matter (DM) annihilations inside the steep density spikes induced by supermassive black holes. We demonstrate that the high DM densities, together with the increased velocity …
Citado por 9 Artículos relacionados Las 9 versiones
[PDF] iop.org

A search for dark matter in the Galactic halo with HAWC

AU Abeysekara, A Albert, R Alfaro… - … of Cosmology and …, 2018 - iopscience.iop.org
Abstract The High Altitude Water Cherenkov (HAWC) gamma-ray observatory is a wide field-of-view observatory sensitive to 500 GeV–100 TeV gamma rays and cosmic rays. With its observations over 2/3 of the sky every day, the HAWC observatory is sensitive to a wide …
Citado por 9 Artículos relacionados Las 8 versiones
[PDF] arxiv.org

Limits to dark matter properties from a combined analysis of MAGIC and Fermi-LAT observations of dwarf satellite galaxies

J Rico, M Wood, A Drlica-Wagner, J Aleksić - arXiv preprint arXiv …, 2015 - arxiv.org
We present the first MAGIC/Fermi-LAT joint search for dark matter annihilation gamma-ray signals from dwarf satellite galaxies. We combine 158 hours of observations of Segue 1 by MAGIC with 6-years observations of 15 dwarf satellite galaxies by the Fermi-LAT. We obtain …
Citado por 8 Artículos relacionados Las 6 versiones

D-brane disformal coupling and thermal dark matter

B Dutta, E Jimenez, I Zavala - Physical Review D, 2017 - APS
Conformal and disformal couplings between a scalar field and matter occur naturally in general scalar-tensor theories. In D-brane models of cosmology and particle physics, these couplings originate from the D-brane action describing the dynamics of its transverse (the …
Citado por 5 Artículos relacionados Las 7 versiones
[PDF] aps.org

Postinflationary scalar tensor cosmology and inflationary parameters

A Maharana, I Zavala - Physical Review D, 2018 - APS
Scalar fields provide attractive modifications of pre-BBN cosmology, which have interesting implications for dark matter abundances. We analyze the effect of these modifications on the number of e-foldings between the horizon exit of cosmic microwave background modes and …
Citado por 4 Artículos relacionados Las 6 versiones
[PDF] arxiv.org

Hot leptogenesis from thermal dark matter

N Bernal, CS Fong - Journal of Cosmology and Astroparticle …, 2017 - iopscience.iop.org
In this work, we investigate a scenario in which heavy Majorana Right-Handed Neutrinos (RHNs) are in thermal equilibrium with a dark sector with temperature higher than the Standard Model (SM) thermal bath. Specifically, we consider the scenario in which thermal …
Citado por 3 Artículos relacionados Las 8 versiones
[PDF] aps.org

Large scalar multiplet dark matter in the high-mass region

HE Logan, T Pilkington - Physical Review D, 2017 - APS
We study two models of scalar dark matter from "large" electroweak multiplets with isospin 5/2 (n= 6 members) and 7/2 (n= 8), whose scalar potentials preserve a Z 2 symmetry. Because of large annihilation cross sections due to electroweak interactions, these scalars …
Citado por 2 Artículos relacionados Las 6 versiones
[PDF] springer.com

Dark matter: TeV-ish rather than miraculous, collisionless rather than dark

N Masi - The European Physical Journal Plus, 2015 - Springer
Current bounds from several astrophysical and laboratory observations are pointing towards new paradigms for dark matter properties. Through a complete analysis of this landscape and a comparison between experimental data, guided by a criterion for simplicity, one can …
Citado por 3 Artículos relacionados Las 5 versiones
[PDF] hindawi.comFull View

Impact of cosmic-ray physics on dark matter indirect searches

D Gaggero, M Valli - Advances in High Energy Physics, 2018 - hindawi.com
The quest for the elusive dark matter (DM) that permeates the Universe (and in general the search for signatures of physics beyond the Standard Model at astronomical scales) provides a unique opportunity and a tough challenge to the high energy astrophysics …
Citado por 2 Artículos relacionados Las 10 versiones
[PDF] arxiv.org

Fermi-LAT Observations of Gamma-Ray Emission Towards the Outer Halo of M31

C Karwin, S Murgia, S Campbell… - arXiv preprint arXiv …, 2019 - arxiv.org
The Andromeda Galaxy is the closest spiral galaxy to us and has been the subject of numerous studies. It harbors a massive dark matter (DM) halo which may span up to~ 600 kpc across and comprises~ 90% of the galaxy's total mass. This halo size translates into a …
Citado por 1 Artículos relacionados Las 6 versiones
[PDF] cambridge.org

First results from HAWC: monitoring the TeV gamma-ray sky

RJ Lauer, HAWC Collaboration - Proceedings of the International …, 2014 - cambridge.org

The High Altitude Water Cherenkov (HAWC) Observatory is a wide-field gamma-ray detector sensitive to primary energies between 100 GeV and 100 TeV. The array is being built at an altitude of 4100 m asl on the Sierra Negra volcano near Puebla, Mexico. Data taking has …
Citado por 1 Artículos relacionados Las 5 versiones

The High Altitude water Cherenkov (HAWC) Observatory

W Springer - … PARTICLE, SPACE PHYSICS AND DETECTORS FOR …, 2014 - World Scientific
The High Altitude Water Cherenkov (HAWC) observatory is a continuously operated, wide field of view detector based upon a water Cherenkov technology developed by the Milagro experiment. HAWC observes, at an elevation of 4100 m on Sierra Negra Mountain in …
Citado por 1 Artículos relacionados Las 6 versiones
[PDF] arxiv.org

Searching for TeV DM evidence from Dwarf Irregular Galaxies with the HAWC Observatory

SH Cadena, R Alfaro, A Sandoval, E Belmont… - arXiv preprint arXiv …, 2017 - arxiv.org
The dynamics of dwarf irregular (dIrr) galaxies are observed to be dominated by dark matter (DM). Recently, the DM density distribution has been studied for 31 dIrrs. Their extended DM halo (Burket type profile) makes these objects good candidates for DM searches. Located in …
Citado por 1 Artículos relacionados Las 7 versiones

Phenomenology of dark matter particles at the centers of galaxies

T Lacroix - 2016 - inspirehep.net
Unveiling the nature of dark matter is one of the greatest challenges of modern physics, at the interface between astrophysics, cosmology and particle physics. In this thesis, I tackle various aspects of indirect searches for dark matter particles, which provide a …
Citado por 1 Artículos relacionados Las 5 versiones
[PDF] springer.com

Cherenkov Water Detectors in Particle Physics and Cosmic Rays

AA Petrukhin, II Yashin - Physics of Atomic Nuclei, 2017 - Springer
Among various types of Cherenkov detectors (solid, liquid and gaseous) created for different studies, the most impressive development was gained by water detectors: from the first detector with a volume of several liters in which the Cherenkov radiation was discovered, to …
Artículos relacionados Las 5 versiones
[PDF] iop.org

Latest news from the High Altitude Water Cherenkov Observatory

AG Muñoz, HAWC Collaboration - Journal of Physics …, 2016 - iopscience.iop.org
Abstract The High Altitude Water Cherenkov Observatory is an air shower detector designed to study very-high-energy gamma rays (~ 100 GeV to~ 100 TeV). It is located in the Pico de Orizaba National Park, Mexico, at an elevation of 4100 m. HAWC started operations since …
Artículos relacionados Las 4 versiones

[PDF] chitkara.edu.in

All-sky observations with HAWC: latest results

JC Arteaga-Velázquez… - Journal of Physics …, 2015 - iopscience.iop.org
Abstract The High Altitude Water Cherenkov (HAWC) observatory is a ground-based air-shower detector designed to study cosmic rays and gamma rays with energies from 100 GeV up to 100 TeV. HAWC simultaneously surveys 2sr of the northern sky with a high duty …
Artículos relacionados Las 4 versiones
[HTML] proquest.com

[HTML] First year results from the HAWC observatory

Sabrina Casanova for the HAWC … - EPJ Web of …, 2017 - search.proquest.com
Abstract The High Altitude Water Cherenkov Observatory is an all-sky surveying instrument sensitive to gamma rays and cosmic rays from 100GeV to 100TeV. With its 2sr instantaneous field of view and a duty cycle of> 95%, HAWC is carrying out an unbiased …
Artículos relacionados
[PDF] aps.org

Inverse seesaw mechanism with compact supersymmetry: Enhanced naturalness and light superpartners

V De Romeri, KM Patel, JWF Valle - Physical Review D, 2018 - APS
We consider the supersymmetric inverse seesaw mechanism for neutrino mass generation within the context of a low-energy effective theory where supersymmetry is broken geometrically in an extra dimensional theory. It is shown that the effective scale …
Artículos relacionados Las 7 versiones

First results from HAWC: monitoring the TeV gamma-ray sky

F Massaro, CC Cheung, E Lopez, A Siemiginowska - cambridge.org
The High Altitude Water Cherenkov (HAWC) Observatory is a wide-field gammaray detector sensitive to primary energies between 100 GeV and 100 TeV. The array is being built at an altitude of 4100 m asl on the Sierra Negra volcano near Puebla, Mexico. Data taking has …
Artículos relacionados
[PDF] academia.edu

[PDF] EPJ Plus

N Masi - academia.edu
Current bounds from several astrophysical and laboratory observations are pointing towards new paradigms for dark matter properties. Through a complete analysis of this landscape and a comparison between experimental data, guided by a criterion for simplicity, one can …
Artículos relacionados Las 3 versiones

[PDF] Dark Matter Capture by the Sun via Self-Interaction

A Widmark - publications.lib.chalmers.se

There is compelling evidence that dark matter constitutes 85% of the universe's total matter content. So far, this distinctly different type of particle is observed only in terms of its gravitational effects, but various detection experiments are conducted and underway. One …
Artículos relacionados
[PDF] epj-conferences.orgFull View

TeV γ-ray astronomy with ground-based air-shower arrays

MA Mostafá - EPJ Web of Conferences, 2016 - epj-conferences.org
The TeV energy band is a very exciting window into the origin of high energy cosmic radiation, particle acceleration, and the annihilation of dark matter particles. Above a few hundred GeV, ground-based experiments of very large effective areas open a new domain …
Artículos relacionados Las 5 versiones
[PDF] arxiv.org

[PDF] Global dark matter limits from a combined analysis of MAGIC and Fermi-LAT data

J Rico, M Wood, J Aleksic, A Drlica-Wagner - PoS, 2015 - inspirehep.net
Dark matter (DM) distributes in the Universe in halos that host galaxy clusters, galaxies and galactic DM “clumps”. A promising way to identify the nature of DM and measure its properties is to search for the Standard Model (SM) particles produced in its annihilation or …
Artículos relacionados Las 3 versiones
[PDF] arxiv.org

Dark Matter Annihilation Cross-Section Limits of Dwarf Spheroidal Galaxies with the High Altitude Water Cherenkov (HAWC) Gamma-Ray Observatory and on the …

ML Proper - 2016 - search.proquest.com
I present an indirect search for Dark Matter using the High Altitude Water Cherenkov (HAWC) gamma-ray observatory. There is significant evidence for dark matter within the known Universe, and we can set constraints on the dark matter annihilation cross-section …
Artículos relacionados Las 2 versiones
[PDF] sissa.it

[PDF] Search for dark matter with LHAASO

G Di Sciascio - The 34th International Cosmic Ray Conference, 2016 - pos.sissa.it
One of the major open issues in our understanding of the Universe is the existence of an extremely-weakly interacting form of matter, the Dark Matter (DM), supported by a wide range of observations including large scale structures, the cosmic microwave background …
Artículos relacionados Las 3 versiones
[PDF] ucm.es

[PDF] Limits to dark matter annihilation cross-section from a combined analysis of MAGIC and Fermi-LAT observations of dwarf satellite galaxies

MLASALA Antonelli, PAA Babic… - arXiv preprint arXiv …, 2016 - eprints.ucm.es

We present the first joint analysis of gamma-ray data from the MAGIC Cherenkov telescopes and the Fermi Large Area Telescope (LAT) to search for gamma-ray signals from dark matter annihilation in dwarf satellite galaxies. We combine 158 hours of Segue 1 observations with …

Annihilation of Dipolar Dark Matter: $\chi\chi \rightarrow \gamma\gamma$

E Barradas-Guevara, JL Díaz-Cruz… - Journal of Nuclear …, 2018 - jnp.chitkara.edu.in
In this work we study the annihilation of dark matter, considering it as a neutral particle with magnetic and/or electric moments not null. The calculation of the effective section of the process χ chi bar$\rightarrow \gamma\gamma \rightarrow$ is made starting from a general form of coupling χ chi bar γ in the …
Artículos relacionados
[PDF] chitkara.edu.in

Annihilation of Dipolar Dark Matter: XX→ YY

E Barradas-Guevara, JL Díaz-Cruz, OG Félix Beltrán… - 2018 - dspace.chitkara.edu.in
In this work we study the annihilation of dark matter, considering it as a neutral particle with magnetic and/or electric moments not null. The calculation of the effective section of the process $\chi\chi$ gg$\rightarrow$ is made starting from a general form of coupling $\chi\chi$g in the framework of an …
Artículos relacionados
[PDF] iop.org

Extragalactic Searches for Dark Matter Annihilation

S Mishra-Sharma - arXiv preprint arXiv:1809.04665, 2018 - arxiv.org
We are at the dawn of a data-driven era in astrophysics and cosmology. A large number of ongoing and forthcoming experiments combined with an increasingly open approach to data availability offer great potential in unlocking some of the deepest mysteries of the Universe …
Artículos relacionados Las 5 versiones

Dark Matter through the Higgs portal

G Arcadi, A Djouadi, M Raidal - arXiv preprint arXiv:1903.03616, 2019 - arxiv.org
We review scenarios in which the particles that account for the Dark Matter (DM) in the Universe interact only through their couplings with the Higgs sector of the theory, the so-called Higgs-portal models. In a first step, we use a general and model-independent …
Artículos relacionados Las 5 versiones
[PDF] inspirehep.net

 2019APh...104...13D
2019/01

Measurements and implications of cosmic ray anisotropies from TeV to trans-EeV energies

- Deligny, O.

□ 54
2019ApJ...871...96A
2019/01

All-sky Measurement of the Anisotropy of Cosmic Rays at 10 TeV and Mapping of the Local Interstellar Magnetic Field

- Abeysekara, A. U.;
- Alfaro, R.;
- Alvarez, C.
- and 401 more

□ 55
2019IJMPD..2830022G
2019

The origin of Galactic cosmic rays: Challenges to the standard paradigm

- Gabici, Stefano;
- Evoli, Carmelo;
- Gaggero, Daniele
- and 5 more

□ 56
2019MNRAS.483..896K
2019/02

Time variability of TeV cosmic ray sky map

- Kumar, Rahul;
- Globus, Noémie;
- Eichler, David
- and 1 more

□ 57
2019arXiv190302905T
2019/03

A Search for Cosmic-ray Proton Anisotropy with the Fermi Large Area Telescope

- The Fermi-LAT Collaboration

□ 58
2019EPJWC.20803005D
2019/05

Information Technologies on High-Energy Astrophysics: Cosmic Ray Anisotropy using HAWC Observatory

- de la Fuente, Eduardo;
- Díaz-Vélez, Juan Carlos;
- Desiati, Paolo
- and 3 more

□ 59
2019JPhCS1263a2002D
2019/06

Detection of Cosmic Rays from ground: an Introduction

- Di Sciascio, Giuseppe

□ 60
2019ICRC...36.1076D
2019/07

Experimental Biases on the Heliospheric Contribution to the Observed TeV Cosmic Ray Anisotropy

- Díaz Vélez, J. C.;
- Desiati, P.

□ 61
2019ApJ...883...33A
2019/09

A Search for Cosmic-Ray Proton Anisotropy with the Fermi Large Area Telescope

- Ajello, M.;
- Baldini, L.;
- Barbiellini, G.
- and 96 more

□ 62
2019JCAP...12..007Q
2019/12

Anisotropies of different mass compositions of cosmic rays

- Qiao, Bing-Qiang;
- Liu, Wei;
- Guo, Yi-Qing
- and 1 more

□ 63
2020ApJ...892....6L

2020/03

Two Numerical Methods for the 3D Anisotropic Propagation of Galactic Cosmic Rays

- Liu, Wei;
- Lin, Su-jie;
- Hu, Hong-bo
- and 2 more

 64
2020Ap&SS.365..135M
2020/08

Test particle simulations of cosmic rays

- Mertsch, Philipp

 65
2020PhR...872....1B
2020/08

Closing in on the origin of Galactic cosmic rays using multimessenger information

- Becker Tjus, Julia;
- Merten, Lukas

 66
2020arXiv200904883D
2020/09

Snowmass 2021 LoI: Determination of cosmic ray properties in the local interstellar medium with all-sky anisotropy observations

- Desiati, Paolo;
- Díaz Vélez, Juan Carlos;
- Pogorelov, Nikolai
- and 1 more

 67
2021arXiv210711454M
2021/07

Observation of Cosmic Ray Anisotropy with Nine Years of IceCube Data

- McNally, Frank;
- Abbasi, Rasha;
- Desiati, Paolo
- and 7 more

□ 68
2022ChPhC..46c0004D
2022/03

Chapter 4 Cosmic-Ray Physics

- D'Ettorre Piazzoli, Benedetto;
- Liu, Si-Ming;
- della Volpe, Domenico
- and 14 more

□ 69
2022ChPhC..46c0004P
2022/03

Chapter 4 Cosmic-Ray Physics

- Piazzoli, Benedetto D'Ettorre;
- Liu, Si-Ming;
- Volpe, Domenico della
- and 15 more

□ 70
2022ApJ...930...82L
2022/05

Statistical Study of the Optimal Local Sources for Cosmic Ray Nuclei and Electrons

- Luo, Qing;
- Qiao, Bing-qiang;
- Liu, Wei
- and 2 more

□ 71
2022Univ....8..307L
2022/05

Interpretation of the Spectra and Anisotropy of Galactic Cosmic Rays

- Li, Aifeng;
- Yin, Shiyu;
- Liu, Maoyuan
- and 3 more

□ 72
2022SSRv..218...42R
2022/08

Galactic Cosmic Rays Throughout the Heliosphere and in the Very Local Interstellar Medium

- Rankin, Jamie S.;
- Bindi, Veronica;
- Bykov, Andrei M.
- and 7 more

 73
2023ApJ...942...13Q
2023/01

Understanding the Phase Reversals of Galactic Cosmic-Ray Anisotropies

- Qiao, Bing-Qiang;
- Luo, Qing;
- Yuan, Qiang
- and 1 more

 74
2023PhRvD.107d3016E
2023/02

(An)isotropy measurement with gravitational wave observations

- Essick, Reed;
- Farr, Will M.;
- Fishbach, Maya
- and 2 more

 75
2023arXiv230406271T
2023/04

A Contribution of the HAWC Observatory to the TeV era in the High Energy Gamma-Ray Astrophysics: The case of the TeV-Halos

- Torres-Escobedo, Ramiro;
- Zhou, Hao;
- de la Fuente, Eduardo

 2023BAAS...55c.093D
2023/07

Using TeV Cosmic Rays to probe the Heliosphere's Boundary with the Local Interstellar Medium

- Desiati, Paolo;
- Díaz Vélez, Juan Carlos;
- Giacinti, Gwenael
- *and 4 more*

 77
2023arXiv231015489C
2023/10

Small-scale cosmic ray anisotropy observed by the GRAPES-3 experiment at TeV energies

- Chakraborty, M.;
- Ahmad, S.;
- Chandra, A.
- *and 35 more*

 78
2023arXiv231208989L
2023/12

Improving HAWC dark matter constraints with Inverse-Compton Emission

- Leung, Dylan M. H.;
- Ng, Kenny C. Y.

The Cosmic Ray and the 10.7 cm flux variations during solar cycles 19-23

J. E. Mendoza-Torres, X. Luo, H. Salazar, Revista Mexicana de Astronomía y Astrofísica, 50, 245, 2014.

Citations A2 B0

 2022pas..conf..138R
2022/10

European F10.7 and F30 Indexes Monitoring System ROSIE

- Rudawy, Paweł;
- Tomczak, Michał;
- Falewicz, Robert
- *and 6 more*

 2
2021PASP..133k4503H
2021/11

Cosmic-ray-related Signals from Detectors in Space: The Spitzer/IRAC Si:As IBC Devices

- Hagan, J. Brendan;
- Rieke, George;
- Fox, Ori D

Milagro limits and HAWC sensitivity for the rate-density of evaporating Primordial Black Holes

Abdo, A. A., Abeysekara, A. U., Alfaro, R., Allen, B. T., Alvarez, C., Ãlvarez, J. D., Arceo, R., Arteaga-Velázquez, J. C., Aune, T., Ayala Solares, H. A., Barber, A. S., et. al. (incluyendo Mendoza-Torres), APh 64, 4-12, 4/2015, ISSN: 0927-6505, https://doi.org/10.1016/j.astropartphys.2014.10.007

A7 B14

A +14 B +2 P127

Citations A 21 B 16

Highlights from the High Altitude Water Cherenkov Observatory

J Pretz - arXiv preprint arXiv:1509.07851, 2015 - arxiv.org
The High Altitude Water Cherenkov (HAWC) Gamma-Ray Observatory was completed this year at a 4100-meter site on the flank of the Sierra Negra volcano in Mexico. HAWC is a water Cherenkov ground array with the capability to distinguish 100 GeV-100 TeV gamma …
Citado por 30 Artículos relacionados Las 7 versiones
[PDF] aps.org

Constraints on primordial black holes from the Galactic gamma-ray background

BJ Carr, K Kohri, Y Sendouda, J Yokoyama - Physical Review D, 2016 - APS
The fraction of the Universe going into primordial black holes (PBHs) with initial mass M*≈ 5× 1 0 14 g, such that they are evaporating at the present epoch, is strongly constrained by observations of both the extragalactic and Galactic γ-ray backgrounds. However, while the …
Citado por 29 Artículos relacionados Las 5 versiones
[PDF] arxiv.org

Primordial Black Holes: Observational characteristics of the final evaporation

TN Ukwatta, DR Stump, JT Linnemann… - Astroparticle …, 2016 - Elsevier
Many early universe theories predict the creation of Primordial Black Holes (PBHs). PBHs could have masses ranging from the Planck mass to 10 5 solar masses or higher depending on the size of the universe at formation. A Black Hole (BH) has a Hawking temperature …
Citado por 14 Artículos relacionados Las 7 versiones
[PDF] inspirehep.net

Calibration of a large water-Cherenkov detector at the Sierra Negra site of LAGO

A Galindo, E Moreno, E Carrasco, I Torres… - Nuclear Instruments and …, 2017 - Elsevier
Abstract The Latin American Giant Observatory (LAGO) is an international network of water-Cherenkov detectors (WCD) set in different sites across Latin America. On top of the Sierra Negra volcano in Mexico at an altitude of 4530 m, LAGO has completed its first out of three …
Citado por 6 Artículos relacionados Las 6 versiones
[PDF] arxiv.org

Primordial black holes

JH MacGibbon, TN Ukwatta, JT Linnemann… - arXiv preprint arXiv …, 2015 - arxiv.org
Primordial Black Holes (PBHs) are of interest in many cosmological contexts. PBHs lighter than about 1012 kg are predicted to be directly detectable by their Hawking radiation. This radiation should produce both a diffuse extragalactic gamma-ray background from the …
Citado por 4 Artículos relacionados Las 4 versiones
[PDF] iop.org

First year results of the High Altitude Water Cherenkov observatory

A Carramiñana - Journal of Physics: Conference Series, 2016 - iopscience.iop.org
Abstract The High Altitude Water Cherenkov (HAWC) γ-ray observatory is a wide field of view (1.8 Sr) and high duty cycle (> 95% up-time) detector of unique capabilities for the study of TeV gamma-ray sources. Installed at an altitude of 4100m in the Northern slope of …
Citado por 4 Artículos relacionados Las 6 versiones
[PDF] arxiv.org

Investigation of primordial black hole bursts using interplanetary network gamma-ray bursts

TN Ukwatta, K Hurley, JH MacGibbon… - The Astrophysical …, 2016 - iopscience.iop.org
The detection of a gamma-ray burst (GRB) in the solar neighborhood would have very important implications for GRB phenomenology. The leading theories for cosmological GRBs would not be able to explain such events. The final bursts of evaporating primordial …
Citado por 4 Artículos relacionados Las 13 versiones
[HTML] sciencedirect.com

[HTML] High-energy gamma-ray sources of cosmological origin

P Brun, J Cohen-Tanugi - Comptes Rendus Physique, 2016 - Elsevier
The current generation of instruments in gamma-ray astrophysics launched a new era in the search for a dark matter signal in the high-energy sky. Such searches are said indirect, in the sense that the presence of a dark matter particle is inferred from the detection of products of …
Citado por 3 Artículos relacionados Las 8 versiones
[PDF] arxiv.org

All-sky sensitivity of HAWC to Gamma-Ray Bursts

J Wood - arXiv preprint arXiv:1508.04120, 2015 - arxiv.org

The High Altitude Water Cherenkov (HAWC) Observatory is a ground-based TeV gamma-ray observatory in the state of Puebla, Mexico at an altitude of 4100 m. Its 22,000 m $^ 2$ instrumented area, wide field of view ($\sim $2 sr), and> 95% uptime make it an ideal …
Citado por 3 Artículos relacionados Las 5 versiones
[PDF] arxiv.org

Sensitivity of HAWC to Primordial Black Hole Bursts

TN Ukwatta, JT Linnemann, D MacGibbon… - arXiv preprint arXiv …, 2015 - arxiv.org
Primordial Black Holes (PBHs) are black holes that may have been created in the early Universe and could be as large as supermassive black holes or as small as the Planck scale. It is believed that a black hole has a temperature inversely proportional to its mass …
Citado por 2 Artículos relacionados Las 10 versiones

Black hole astrophysics with HAWC, the High Altitude Water Cherenkov γ-ray observatory

A Carramiñana, HAWC Collaboration - Proceedings of the …, 2016 - cambridge.org
The HAWC gamma-ray observatory is a wide field of view and high duty cycle γ-ray detector investigating the 0.1-100 TeV energy range. It has detected supermassive black holes in the near Universe, and is seeking to detect black hole related objects like gamma-ray bursts …
Citado por 1 Artículos relacionados Las 5 versiones
[PDF] arxiv.org

Search for Primordial Black Hole Evaporation with VERITAS

S Archambault - arXiv preprint arXiv:1709.00307, 2017 - arxiv.org
Primordial black holes are black holes that may have formed from density fluctuations in the early universe. It has been theorized that black holes slowly evaporate. If primordial black holes of initial mass of $10^{14} $ g were formed, their evaporation would end in this epoch …
Artículos relacionados Las 4 versiones
[PDF] hindawi.comFull View

Capability of the HAWC Gamma-Ray Observatory for the Indirect Detection of Ultrahigh-Energy Neutrinos

H León Vargas, A Sandoval, E Belmont… - Advances in …, 2017 - hindawi.com
The detection of ultrahigh-energy neutrinos, with energies in the PeV range or above, is a topic of great interest in modern astroparticle physics. The importance comes from the fact that these neutrinos point back to the most energetic particle accelerators in the Universe …
Artículos relacionados Las 10 versiones
[PDF] iop.org

All-sky observations with HAWC: latest results

JC Arteaga-Velázquez… - Journal of Physics …, 2015 - iopscience.iop.org
Abstract The High Altitude Water Cherenkov (HAWC) observatory is a ground-based air-shower detector designed to study cosmic rays and gamma rays with energies from 100 GeV up to 100 TeV. HAWC simultaneously surveys 2sr of the northern sky with a high duty …

Artículos relacionados Las 4 versiones
[HTML] proquest.com

[HTML] First year results from the HAWC observatory

Sabrina Casanova for the HAWC … - EPJ Web of …, 2017 - search.proquest.com
Abstract The High Altitude Water Cherenkov Observatory is an all-sky surveying instrument sensitive to gamma rays and cosmic rays from 100GeV to 100TeV. With its 2sr instantaneous field of view and a duty cycle of> 95%, HAWC is carrying out an unbiased …
Artículos relacionados

Highlights from the HAWC telescope

S Casanova - 2017 - World Scientific
The High Altitude Water Cherenkov (HAWC) Gamma-Ray Observatory is a water Cherenkov ground array with the capability to distinguish 100 GeV-100 TeV gamma rays from the hadronic cosmic-ray background. HAWC is uniquely suited to study extremely high energy …
Artículos relacionados Las 3 versiones
[PDF] sissa.it

[PDF] Searching for primordial black hole evaporation signal with AMON

G Tešić - The 34th International Cosmic Ray Conference, 2016 - pos.sissa.it
Primordial Black Holes (PBHs) may have been created from the gravitational collapse of overdense regions in the early universe. The initial masses of PBHs are of the order of the particle horizon mass at the time when they were formed: MH= c3t/G [1, 2]. Since the exact …
Artículos relacionados Las 3 versiones
[PDF] arizona.edu

[PDF] Search for Very-High-Energy Gamma-Ray Emission from Primordial Black Holes with VERITAS

S Archambault - 2016 - veritas.sao.arizona.edu
Primordial black holes are black holes that may have formed from density fluctuations in the early universe. It has been theorized that black holes slowly evaporate. If primordial black holes of initial mass 1014g (or 10-20 times the mass of the Sun) were formed, their …
Artículos relacionados Las 2 versiones

[CITAS] Экспериментальные и теоретические поиски первичных черных дыр

ПА Климай, ЭВ Бугаев

Science Case for a Wide Field-of-View Very-High-Energy Gamma-Ray Observatory in the Southern Hemisphere

Albert, A.; Alfaro, R.; Ashkar, H., https://hal.archives-ouvertes.fr/hal-02089566, Contributeur : Inspire Hep <inspire-hal-cataloger@cern.ch>

Search for Gamma-Ray Emission from Local Primordial Black Holes with the Fermi Large Area Telescope

Ackermann, M.; Atwood, W. B.; Baldini, L., The Astrophysical Journal, Volume 857, Number 1, 2018

 2018arXiv180200100T
2018/01

Search for Gamma-Ray Emission from Local Primordial Black Holes with the Fermi Large Area Telescope

- The Fermi-LAT Collaboration

 19
2018ApJ...857...49A
2018/04

Search for Gamma-Ray Emission from Local Primordial Black Holes with the Fermi Large Area Telescope

- Ackermann, M.;
- Atwood, W. B.;
- Baldini, L.
- *and 113 more*

 20
2019arXiv190208429A
2019/02

Science Case for a Wide Field-of-View Very-High-Energy Gamma-Ray Observatory in the Southern Hemisphere

- Albert, A.;
- Alfaro, R.;
- Ashkar, H.
- *and 100 more*

 21
2020JCAP...04..026A
2020/04

Constraining the local burst rate density of primordial black holes with HAWC

- Albert, A.;
- Alfaro, R.;
- Alvarez, C.
- *and 84 more*

□ 22
2021JCAP...08..040L
2021/08

Prospects for the observation of Primordial Black Hole evaporation with the Southern Wide field of view Gamma-ray Observatory

- López-Coto, R.;
- Doro, M.;
- de Angelis, A.
- *and 2 more*

□ 23
2021arXiv211101198D
2021/11

Fundamental Physics Searches with IACTs

- Doro, Michele;
- Sánchez-Conde, Miguel Angel;
- Hütten, Moritz

□ 24
2021JCAP...12..051C
2021/12

Evaporating primordial black holes in gamma ray and neutrino telescopes

- Capanema, Antonio;
- Esmaeili, AmirFarzan;
- Esmaili, Arman

□ 25
2021JPhCS2156a2035C
2021/12

Evaporation of Primordial Black Holes into Light Dark Particles

- Chianese, Marco

□ 2022PhRvD.105b1302C
2022/01

Direct detection of light dark matter from evaporating primordial black holes

- Calabrese, Roberta;

- Chianese, Marco;
- Fiorillo, Damiano F. G.
- *and 1 more*

□ 27
2022Galax..10...92H
2022/08

TeV Dark Matter Searches in the Extragalactic Gamma-ray Sky

- Hütten, Moritz;
- Kerszberg, Daniel

□ 28
2022JHEP...12..090C
2022/12

Determining the spin of light primordial black holes with Hawking radiation

- Calzà, Marco;
- Rosa, João G.

□ 29
2023JCAP...04..040A
2023/04

Search for the evaporation of primordial black holes with H.E.S.S.

- Aharonian, F.;
- Ait Benkhali, F.;
- Aschersleben, J.
- *and 145 more*

□ 30
2023PrPNP.13104040A
2023/07

Primordial black hole constraints with Hawking radiation-A review

- Auffinger, Jérémy

□ 31
2023arXiv230706467B
2023/07

Searching for Exploding Black Holes

- Boluna, Xavier;
- Profumo, Stefano;
- Blé, Juliette
- *and 1 more*

□ 32
2023PhRvD.108h3014P
2023/10

Identifying spin properties of evaporating black holes through asymmetric neutrino and photon emission

- Perez-Gonzalez, Yuber F.

□ 33
2023arXiv231209261C
2023/12

Evaporating Kerr black holes as probes of new physics

- Calzà, Marco;
- Rosa, João G

VAMOS: A pathfinder for the HAWC gamma-ray observatory

Abeysekara, A. U., Alfaro, R., Alvarez, C., Álvarez, J. D., Ãngeles, F., Arceo, R., Arteaga-Velázquez, J. C., Avila-Aroche, A., Ayala Solares, H. A., Badillo, C., et. al. (incluyendo Mendoza-Torres),APh 62, 125-133, 3/2015, ISSN: 0927-6505, https://doi.org/10.1016/j.astropartphys.2014.08.004

A1 B11

A +2 B +2 P 136

Citations A 3 B 13

Gamma-ray observations of active galactic nuclei

G Madejski, M Sikora - Annual Review of Astronomy and …, 2016 - annualreviews.org
This article reviews the recent observational results regarding γ-ray emission from active galaxies. The most numerous discrete extragalactic γ-ray sources are AGNs dominated by relativistic jets pointing in our direction (commonly known as blazars), and they are the main …
Citado por 40 Artículos relacionados Las 3 versiones

Altitude survey of the galactic cosmic ray flux with a Mini Neutron Monitor

A Lara, A Borgazzi, R Caballero-Lopez - Advances in Space Research, 2016 - Elsevier
We present the results of a survey of the galactic cosmic ray (GCR) flux measured at different altitudes, from the sea level, up to~ 4600 m asl This altitude survey was carried out with a "Mini" Neutron Monitor (MNM), and performed inside a small area of the central part of …
Citado por 5 Artículos relacionados Las 3 versiones

Observation of TeV-Energy Cosmic-Ray Anisotropy with the HAWC Observatory

DW Fiorino - 2015 - search.proquest.com
Over the past two decades, ground-based measurements of the arrival directions of TeV cosmic rays have revealed an unexpected anisotropy. Multiple detectors have recorded fluxes above all-sky averages to high statistical significance for features at large (about 180) …
Citado por 3 Artículos relacionados Las 2 versiones
[PDF] cambridge.org

First results from HAWC: monitoring the TeV gamma-ray sky

RJ Lauer, HAWC Collaboration - Proceedings of the International …, 2014 - cambridge.org
The High Altitude Water Cherenkov (HAWC) Observatory is a wide-field gamma-ray detector sensitive to primary energies between 100 GeV and 100 TeV. The array is being built at an altitude of 4100 m asl on the Sierra Negra volcano near Puebla, Mexico. Data taking has …
Citado por 1 Artículos relacionados Las 5 versiones
[PDF] mtu.edu

Search for TeV gamma-ray sources in the galactic plane with the HAWC observatory

H Zhou - 2015 - digitalcommons.mtu.edu
Cosmic rays, with an energy density of $\sim1\,\text {eV}\,\text {cm}^{-3} $, play an important role in the evolution of our Galaxy. Very high energy (TeV) gamma rays provide unique information about the acceleration sites of Galactic cosmic rays. The High Altitude Water …
Citado por 1 Artículos relacionados Las 4 versiones
[PDF] inspirehep.net

Monitoring at TeV Energies with M@ TE

R Alfaro, D Hiriart, F Garfias, A Bernal, I Torres… - PoS, 2017 - inspirehep.net
Active galactic nuclei (AGN) emit radiation across the whole electromagnetic spectrum. Their spectral energy distributions (SEDs) feature two peaks. While the low energy peak is synchrotron radiation from accelerated particles, the origin of the high energy peak is still …
Citado por 1 Artículos relacionados Las 3 versiones
[PDF] unam.mx

[PDF] HAWC: astronomía de rayos gamma desde México

C Velázquez - cienciorama.unam.mx
Los fenómenos más violentos en nuestro universo, como la explosión de supernovas, los pulsares y los centros activos de las galaxias, producen la forma más poderosa de radiación electromagnética: los rayos gamma. En la Tierra podemos detectar los efectos de …

Artículos relacionados
[PDF] iop.org

All-sky observations with HAWC: latest results

JC Arteaga-Velázquez… - Journal of Physics …, 2015 - iopscience.iop.org
Abstract The High Altitude Water Cherenkov (HAWC) observatory is a ground-based air-shower detector designed to study cosmic rays and gamma rays with energies from 100 GeV up to 100 TeV. HAWC simultaneously surveys 2sr of the northern sky with a high duty …
Artículos relacionados Las 4 versiones

First results from HAWC: monitoring the TeV gamma-ray sky
F Massaro, CC Cheung, E Lopez, A Siemiginowska - cambridge.org
The High Altitude Water Cherenkov (HAWC) Observatory is a wide-field gammaray detector sensitive to primary energies between 100 GeV and 100 TeV. The array is being built at an altitude of 4100 m asl on the Sierra Negra volcano near Puebla, Mexico. Data taking has …
Artículos relacionados
[PDF] arxiv.org

A general data quality inspection for Gamma-Ray Bursts searches with HAWC, C de León, H Salazar, L Villaseñor - arXiv preprint arXiv:1708.03645, 2017 - arxiv.org The High Altitude Water Cherenkov (HAWC) is a wide field-of-view gamma-ray observatory sensitive to gamma-rays in the 300 GeV-100 TeV energy range, located in Mexico at an altitude of 4,100 m above sea level. The detector consists of 300 Water Cherenkov Detectors …

Cosmic Ray Astrophysics using The High Altitude Water Cherenkov (HAWC) Observatory in México
de la Fuente, Eduardo; Díaz-Vélez, Juan Carlos; Almada, Alberto Hernández; Nigoche-Netro, Alberto;HAWC Collaboration, EPJ Web Conf. **Volume** 145, 2017

Information Technologies on High-Energy Astrophysics: Cosmic Ray Anisotropy using HAWC Observatory
de la Fuente, Eduardo; Díaz-Vélez, Juan Carlos; Desiati, Paolo; García-Luna, Jose Luis; Torrealba, Janet; Gúzman-Alcála, Ricardo, EPJ Web of Conferences **208**, 03005 (2019)

 2022ExA....53..991N
2022/06

Study of water Cherenkov detector to improve the angular resolution of an air-shower array for ultra-high-energy gamma-ray observation

- Nakada, H.;
- Shiomi, A.;
- Ohnishi, M.
- *and 3 more*

 9

2023arXiv230406271T
2023/04

A Contribution of the HAWC Observatory to the TeV era in the High Energy Gamma-Ray Astrophysics: The case of the TeV-Halos

- Torres-Escobedo, Ramiro;
- Zhou, Hao;
- de la Fuente, Eduardo
- *and 130 more*

□ 10
2023NIMPA105068138K
2023/05

A double-layered Water Cherenkov Detector array for Gamma-ray astronomy

- Kunwar, Samridha;
- Goksu, Hazal;
- Hinton, Jim
- *and 4 more*

□ 11
2023NIMPA105268253A
2023/07

The High-Altitude Water Cherenkov (HAWC) observatory in México: The primary detector

- Abeysekara, A. U.;
- Albert, A.;
- Alfaro, R.

The Use of Planar Feeds for Solar Radio Observations

Mendoza-Torres, J. E., Colín-Beltrán, E., Corona-Chávez, A., Palacios-Fonseca, J. S., Rodríguez-Pedroza, B., Tlatelpa-Osorio, Y. E., García-Santos, J. C., Sánchez-Urrieta, S., Solar Physics Vol 290, Issue 1, 295-299, 2015. DOI 10.1007/s11207-014-0561-3, ISSN: 0038-0938 (Print) 1573-093X (Online)
Citations A 1 B 0 Cited 1

2015SoPh..290....1P
2015/01

New Eyes Looking at Solar Activity: Challenges for Theory and Simulations - Placing It into Context

- Pohjolainen, S.;
- Karlický, M.;
- van Driel-Gesztelyi, L

Search for Gamma-Rays from the Unusually Bright GRB 130427A with the HAWC Gamma-Ray Observatory

Abeysekara, A. U., Alfaro, R., Alvarez, C., Ãlvarez, J. D., Arceo, R., Arteaga-Veázquez, J. C., Ayala Solares, H. A., Barber, A. S., Baughman, The HAWC collaboration (incluyendo Mendoza-Torres), ApJ 800, 78-, 2/2015.

Citations A29 B16

Physics of gamma-ray bursts prompt emission

A Pe'er - Advances in Astronomy, 2015 - hindawi.com
In recent years, our understanding of gamma-ray bursts (GRB) prompt emission has been revolutionized, due to a combination of new instruments, new analysis methods, and novel ideas. In this review, I describe the most recent observational results and current theoretical …
Citado por 45 Artículos relacionados Las 10 versiones
[PDF] arxiv.org

Search for TeV Gamma-Ray Emission from Point-like Sources in the Inner Galactic Plane with a Partial Configuration of the HAWC Observatory

AU Abeysekara, R Alfaro, C Alvarez… - The Astrophysical …, 2016 - iopscience.iop.org
A survey of the inner Galaxy region of Galactic longitude $ l\in [+ 15^\circ,+ 50^\circ] $ and latitude $ b\in [-4^\circ,+ 4^\circ] $ is performed using one-third of the High Altitude Water Cherenkov Observatory, operated during its construction phase. To address the ambiguities …
Citado por 25 Artículos relacionados Las 13 versiones
[PDF] arxiv.org

GRB 110731A: Early afterglow in stellar wind powered by a magnetized outflow

N Fraija - The Astrophysical Journal, 2015 - iopscience.iop.org
One of the most energetic gamma-ray bursts, GRB 110731A, was observed from an optical to GeV energy range. Previous analysis of the prompt phase revealed similarities between the Large Area Telescope (LAT) bursts observed by Fermi:(1) a delayed onset of the high …
Citado por 17 Artículos relacionados Las 7 versiones
[HTML] sciencedirect.com

Gamma-ray bursts at high and very high energies

F Piron - Comptes Rendus Physique, 2016 - Elsevier
Abstract Gamma-Ray Bursts (GRBs) are extra-galactic and extremely energetic transient emissions of gamma rays, which are thought to be associated with the death of massive stars or the merger of compact objects in binary systems. Their huge luminosities involve the …
Citado por 15 Artículos relacionados Las 10 versiones
[PDF] arxiv.org

Modeling the Early Multiwavelength Emission in GRB 130427a

N Fraija, W Lee, P Veres - The Astrophysical Journal, 2016 - iopscience.iop.org
One of the most powerful gamma-ray bursts, GRB 130427A was swiftly detected from GeV γ-rays to optical wavelengths. In the GeV band, the Large Area Telescope (LAT) on board the Fermi Gamma-Ray Space Telescope observed the highest-energy photon ever recorded of …
Citado por 13 Artículos relacionados Las 7 versiones
[PDF] arxiv.org

Search for Very-high-energy Emission from Gamma-Ray Bursts Using the First 18 Months of Data from the HAWC Gamma-Ray Observatory

R Alfaro, C Alvarez, JD Álvarez, R Arceo… - The Astrophysical …, 2017 - iopscience.iop.org
Abstract The High Altitude Water Cherenkov (HAWC) Gamma-ray Observatory is an extensive air shower detector operating in central Mexico that has recently completed its first two years of full operations. If for a burst like GRB 130427A at a redshift of 0.34 and a high …
Citado por 12 Artículos relacionados Las 9 versiones
[PDF] arxiv.org

First results from HAWC on GRBs

D Lennarz, I Taboada - arXiv preprint arXiv:1508.07325, 2015 - arxiv.org
In this contribution, the first results of HAWC, searching for VHE gamma-ray emission from gamma-ray bursts (GRBs) reported by $\mathit {Swift} $, are presented. The HAWC gamma-ray observatory is operating in central Mexico at an altitude of 4,100 m above sea level. With …
Citado por 9 Artículos relacionados Las 5 versiones
[PDF] cambridge.org

Hunting Gravitational Waves with Multi-Messenger Counterparts: Australia's Role

EJ Howell, A Rowlinson, DM Coward… - Publications of the …, 2015 - cambridge.org
The first observations by a worldwide network of advanced interferometric gravitational wave detectors offer a unique opportunity for the astronomical community. At design sensitivity, these facilities will be able to detect coalescing binary neutron stars to distances …
Citado por 7 Artículos relacionados Las 13 versiones
[PDF] arxiv.org

The HESS II GRB Program

RD Parsons, A Balzer, M Fuessling, C Hoischen… - arXiv preprint arXiv …, 2015 - arxiv.org
Gamma-ray bursts (GRBs) are some of the most energetic and exotic events in the Universe, however their behaviour at the highest energies (> 10 GeV) is largely unknown. Although the Fermi-LAT space telescope has detected several GRBs in this energy range, it is limited …
Citado por 7 Artículos relacionados Las 6 versiones
[PDF] inspirehep.net

Calibration of a large water-Cherenkov detector at the Sierra Negra site of LAGO

A Galindo, E Moreno, E Carrasco, I Torres… - Nuclear Instruments and …, 2017 - Elsevier

Abstract The Latin American Giant Observatory (LAGO) is an international network of water-Cherenkov detectors (WCD) set in different sites across Latin America. On top of the Sierra Negra volcano in Mexico at an altitude of 4530 m, LAGO has completed its first out of three …
Citado por 6 Artículos relacionados Las 6 versiones

[HTML] The Theory of Gamma-Ray Bursts

Z Dai, F Daigne, P Mészáros - Space Science Reviews, 2017 - Springer
This chapter gives a brief review on the theory of gamma-ray bursts (GRBs), including the models of multi-messengers (eg, prompt multiwavelength electromagnetic emissions, high-energy neutrinos, ultra-high-energy cosmic rays, and gravitational waves) and central …
Citado por 6 Artículos relacionados Las 7 versiones
[PDF] sissa.it

[PDF] Ground-based gamma-ray astronomy

M Lemoine-Goumard - The 34th International Cosmic Ray Conference, 2016 - pos.sissa.it
This article is the write-up of a rapporteur talk given at the 34th ICRC in The Hague, Netherlands. It attempts to review the results and developments presented at the conference and associated to the vibrant field of ground-based gamma-ray astronomy. In total, it aims to …
Citado por 5 Artículos relacionados Las 4 versiones
[PDF] arxiv.org

The origin of the optical flashes: The case study of GRB 080319B and GRB 130427A

N Fraija, P Veres - The Astrophysical Journal, 2018 - iopscience.iop.org
Correlations between optical flashes and gamma-ray emissions in gamma-ray bursts (GRBs) have been searched in order to clarify the question of whether these emissions occur at internal and/or external shocks. Among the most powerful GRBs ever recorded are …
Citado por 3 Artículos relacionados Las 5 versiones
[PDF] arxiv.org

Searching for Gamma-Ray counterparts to Gravitational Waves from merging binary neutron stars with the Cherenkov telescope array

B Patricelli, A Stamerra, M Razzano… - Journal of Cosmology …, 2018 - iopscience.iop.org
The merger of binary neutron star (BNS) systems are predicted to be progenitors of short gamma-ray bursts (GRBs); the definitive probe of this association came with the recent detection of gravitational waves (GWs) from a BNS merger by Advanced LIGO and …
Citado por 2 Artículos relacionados Las 7 versiones

The HESS II GRB observation scheme

RD Parsons, F Schüssler, T Garrigoux… - AIP Conference …, 2017 - aip.scitation.org
Gamma-ray bursts (GRBs) are some of the Universe's most enigmatic and exotic events. However, at energies above 10 GeV their behaviour remains largely unknown. Although space based telescopes such as the Fermi-LAT have been able to detect GRBs in this …
Citado por 2 Artículos relacionados Las 7 versiones
[PDF] arxiv.org

Search for Gamma-Ray Bursts with the ARGO-YBJ Detector in Shower Mode

B Bartoli, P Bernardini, XJ Bi, Z Cao… - The Astrophysical …, 2017 - iopscience.iop.org
The ARGO-YBJ detector, located at the Yangbajing Cosmic Ray Laboratory (4300 m asl, Tibet, China), was a" full coverage"(central carpet with an active area of~ 93%) air shower array dedicated to gamma-ray astronomy and cosmic-ray studies. The wide field of view (~ 2 …
Citado por 2 Artículos relacionados Las 14 versiones
[HTML] oup.com

Probing massive stars around gamma-ray burst progenitors

W Lu, P Kumar, GF Smoot - Monthly Notices of the Royal …, 2015 - academic.oup.com
Long gamma-ray bursts (GRBs) are produced by ultra-relativistic jets launched from core collapse of massive stars. Most massive stars form in binaries and/or in star clusters, which means that there may be a significant external photon field (EPF) around the GRB …
Citado por 2 Artículos relacionados Las 8 versiones

The HAWC GRB programme

D Lennarz, I Taboada, J Wood… - AIP Conference …, 2017 - aip.scitation.org
HAWC is a very-high-energy gamma-ray observatory operating in central Mexico at an altitude of 4, 100 m above sea level. It has an instantaneous field of view of 2 sr and surveys 2/3 of the sky every day. The duty cycle (up time fraction) of over 95% and the lack of …
Citado por 2 Artículos relacionados Las 4 versiones
[PDF] arxiv.org

Sensitivity study of (10,100) GeV gamma-ray bursts with double shower front events from ARGO-YBJ

XX Zhou, LL Gao, Y Zhang, YQ Guo, QQ Zhu… - Chinese …, 2016 - iopscience.iop.org
ARGO-YBJ, located at the Yangbajing Cosmic Ray Observatory (4300 m asl, Tibet, China), is a full coverage air shower array, with an energy threshold of~ 300 GeV for gamma-ray astronomy. Most of the recorded events are single front showers, satisfying the trigger …
Citado por 1 Artículos relacionados Las 7 versiones
[PDF] mtu.edu

Search for TeV gamma-ray sources in the galactic plane with the HAWC observatory

H Zhou - 2015 - digitalcommons.mtu.edu
Cosmic rays, with an energy density of $\sim1\,\text {eV}\,\text {cm}^{-3} $, play an important role in the evolution of our Galaxy. Very high energy (TeV) gamma rays provide unique information about the acceleration sites of Galactic cosmic rays. The High Altitude Water …
Citado por 1 Artículos relacionados Las 4 versiones

Searching for TeV DM evidence from Dwarf Irregular Galaxies with the HAWC Observatory

SH Cadena, R Alfaro, A Sandoval, E Belmont… - arXiv preprint arXiv …, 2017 - arxiv.org
The dynamics of dwarf irregular (dIrr) galaxies are observed to be dominated by dark matter (DM). Recently, the DM density distribution has been studied for 31 dIrrs. Their extended DM halo (Burket type profile) makes these objects good candidates for DM searches. Located in …
Citado por 1 Artículos relacionados Las 7 versiones
[PDF] cambridge.org

Black hole astrophysics with HAWC, the High Altitude Water Cherenkov γ-ray observatory

A Carramiñana, HAWC Collaboration - Proceedings of the …, 2016 - cambridge.org
The HAWC gamma-ray observatory is a wide field of view and high duty cycle γ-ray detector investigating the 0.1-100 TeV energy range. It has detected supermassive black holes in the near Universe, and is seeking to detect black hole related objects like gamma-ray bursts …
Citado por 1 Artículos relacionados Las 5 versiones
[PDF] arxiv.org

Surveying the TeV sky with HAWC

RJ Lauer - arXiv preprint arXiv:1509.07561, 2015 - arxiv.org
The High altitude Water Cherenkov (HAWC) Observatory has been completed and began full operation in early 2015. Located at an elevation of 4,100 m near the Sierra Negra volcano in the state of Puebla, Mexico, HAWC consists of 300 water tanks instrumented with …
Citado por 1 Artículos relacionados Las 4 versiones

[CITAS] PoS (ICRC2015) 012 Status of ground-based gamma-ray astronomy

M Lemoine-Goumard - 2015
Artículos relacionados
[PDF] psu.edu

A Likelihood Search for Very High-energy Gamma-ray Bursts with the High Altitude Water Cherenkov Observatory

KS Woodle - 2015 - etda.libraries.psu.edu
Gamma-Ray bursts (GRBs) are extremely powerful transient events that occur at cosmological distances. Observations of energy spectra of GRBs can provide information about the intervening space between the burst and Earth as well as about the source itself …
Artículos relacionados Las 3 versiones
[PDF] hindawi.comFull View

Capability of the HAWC Gamma-Ray Observatory for the Indirect Detection of Ultrahigh-Energy Neutrinos

H León Vargas, A Sandoval, E Belmont… - Advances in …, 2017 - hindawi.com
The detection of ultrahigh-energy neutrinos, with energies in the PeV range or above, is a topic of great interest in modern astroparticle physics. The importance comes from the fact that these neutrinos point back to the most energetic particle accelerators in the Universe …
Artículos relacionados Las 10 versiones
[PDF] iop.org

All-sky observations with HAWC: latest results

JC Arteaga-Velázquez… - Journal of Physics …, 2015 - iopscience.iop.org
Abstract The High Altitude Water Cherenkov (HAWC) observatory is a ground-based air-shower detector designed to study cosmic rays and gamma rays with energies from 100 GeV up to 100 TeV. HAWC simultaneously surveys 2sr of the northern sky with a high duty …
Artículos relacionados Las 4 versiones
[PDF] umd.edu

Precursors in gamma-ray bursts observed by Fermi

S Zhu - 2015 - drum.lib.umd.edu
Gamma-ray bursts (GRBs) are some of the most energetic explosions in the universe. They come from the core collapses of massive stars and the mergers of compact objects, and are observed as bright flashes of gamma rays (prompt emission) followed by long-lived, fading …
Artículos relacionados Las 3 versiones
[HTML] proquest.com

First year results from the HAWC observatory

Sabrina Casanova for the HAWC … - EPJ Web of …, 2017 - search.proquest.com
Abstract The High Altitude Water Cherenkov Observatory is an all-sky surveying instrument sensitive to gamma rays and cosmic rays from 100GeV to 100TeV. With its 2sr instantaneous field of view and a duty cycle of> 95%, HAWC is carrying out an unbiased …
Artículos relacionados
[PDF] arxiv.org

The early afterglow and magnetized ejecta present in GRB 110731A

N Fraija, WH Lee - arXiv preprint arXiv:1508.02130, 2015 - arxiv.org
One of the most energetic gamma-ray bursts GRB 110731A, was observed from optical to GeV energy range by Fermi and Swift Observatories, and by the MOA and GROND optical telescopes. The multiwavelength observations over different epochs (from trigger time to …
Artículos relacionados Las 7 versiones
[PDF] units.it

Study of astrophysical transients with the MAGIC telescopes

A Berti - 2018 - arts.units.it
This PhD work is focused on the study of transient sources, astrophysical events exhibiting short-time scale variability. In particular, Gamma-Ray Bursts (GRBs) and Gravitational Waves (GWs) counterparts were searched using the data of the MAGIC telescopes, two …
Artículos relacionados
[PDF] iop.org

Possible GeV counterpart at the ground level associated with Fermi LAT gamma-ray bursts

CRA Augusto, CE Navia, MN de Oliveira… - Journal of Physics …, 2018 - iopscience.iop.org

Abstract From June 2014 to February 2017, the Fermi LAT detected 46 gamma-ray bursts (GRBs) with photon energies above 20 MeV, and the trigger coordinates of seven of them were within the FoV of New-Tupi detector located in the central region of the South Atlantic …
Artículos relacionados Las 7 versiones
[PDF] epj-conferences.orgFull View

First year results from the HAWC observatory

S Casanova - EPJ Web of Conferences, 2017 - epj-conferences.org
The High Altitude Water Cherenkov Observatory is an all-sky surveying instrument sensitive to gamma rays and cosmic rays from 100GeV to 100TeV. With its 2sr instantaneous field of view and a duty cycle of> 95%, HAWC is carrying out an unbiased survey of the Northern …
Artículos relacionados Las 5 versiones
[PDF] arxiv.org

Status of ground-based gamma-ray astronomy

M Lemoine-Goumard - arXiv preprint arXiv:1510.01373, 2015 - arxiv.org
This article is the write-up of a rapporteur talk given at the 34th ICRC in The Hague, Netherlands. It attempts to review the results and developments presented at the conference and associated to the vibrant field of ground-based gamma-ray astronomy. In total, it aims to …
Artículos relacionados Las 3 versiones
[PDF] arxiv.org

A general data quality inspection for Gamma-Ray Bursts searches with HAWC

C de León, H Salazar, L Villaseñor - arXiv preprint arXiv:1708.03645, 2017 - arxiv.org
The High Altitude Water Cherenkov (HAWC) is a wide field-of-view gamma-ray observatory sensitive to gamma-rays in the 300 GeV-100 TeV energy range, located in Mexico at an altitude of 4,100 m above sea level. The detector consists of 300 Water Cherenkov Detectors …
Artículos relacionados Las 5 versiones
[PDF] sissa.it

Very High Energy Emission from Gamma-Ray Bursts

S Razzaque, R Moharana - The 34th International Cosmic Ray …, 2016 - pos.sissa.it
GRBs are the most powerful explosions in the universe with most of their visible energy emitted in~ 0.1-1 MeV gamma rays [1]. The Energetic Gamma Ray Experiment Telescope (EGRET) onboard the Compton Gamma Ray Observatory (CGRO) detected up to 18 GeV …
Artículos relacionados Las 5 versiones

Sensitivity study of (10,100) GeV gamma-ray bursts with double shower front events from ARGO-YBJ

周□ 秀， 高□ □， □ 宇， 郭□ □， 朱清棋， □ □ 玉… - Chinese Physics …, 2016 - cnki.com.cn
ARGO-YBJ, located at the Yangbajing Cosmic Ray Observatory (4300 m asl, Tibet, China), is a full coverage air shower array, with an energy threshold of~ 300 Ge V for gamma-ray astronomy. Most of the recorded events are single front showers, satisfying the trigger …

Artículos relacionados Las 2 versiones

Two Predictions of Supernova: GRB 130427A/SN 2013cq and GRB 180728A/SN 2018fip

Y Wang, JA Rueda, R Ruffini, L Becerra… - The Astrophysical …, 2019 - iopscience.iop.org
Abstract On 2018 July 28, GRB 180728A triggered Swift satellites and, soon after the determination of the redshift, we identified this source as a type II binary-driven hypernova (BdHN II) in our model. Consequently, we predicted the appearance time of its associated …
Artículos relacionados Las 6 versiones

+++Synchrotron Self-Compton Emission from External Shocks as the Origin of the Sub-TeV Emission in GRB 180720B and GRB 190114C

Wang, Xiang-Yu; Liu, Ruo-Yu; Zhang, Hai-Ming; Xi, Shao-Qiang; Zhang, Bing, 2019ApJ...884..117W

The Southern Wide-Field Gamma-Ray Observatory (SWGO): A Next-Generation Ground-Based Survey Instrument

Huentemeyer, Petra; BenZvi, Segev; Dingus, Brenda; Fleischhack, Henrike; Schoorlemmer, Harm; Weisgarber, Tom, 2019BAAS...51g.109H

Search for very-high-energy photons from Gamma-ray bursts with HAWC

Fraija, N.; Gonzalez, M. M., 2019ICRC...36..679

Two Predictions of Supernova: GRB 130427A/SN 2013cq and GRB 180728A/SN 2018fip

Wang, Y.; Rueda, J. A.; Ruffini, R.; Becerra, L.; Bianco, C.; Becerra, L.; Li, L.; Karlica, M, 2019ApJ...874...39W

Possible GeV counterpart at the ground level associated with Fermi LAT gamma-ray bursts

Augusto, C. R. A.;

- Navia, C. E.;
- de Oliveira, M. N.;
- Nepomuceno, André;
- Kopenkin, V.;
- Sinzi, T., 2018JPhCo...2g5013A

Searching for gamma-ray counterparts to gravitational waves from merging binary neutron stars with the Cherenkov Telescope Array

Patricelli, B.; Stamerra, A.; Razzano, M.; Pian, E.; Cella, G., 2018JCAP...05..056P

The Origin of the Optical Flashes: The Case Study of GRB 080319B and GRB 130427A

Fraija, N.; Veres, P., 2018ApJ...859...70F

□ 35
2022arXiv220310074E
2022/03

Advancing the Landscape of Multimessenger Science in the Next Decade

- Engel, Kristi;
- Lewis, Tiffany;
- Stein Muzio, Marco
- *and 91 more*

□ 36
2022ApJ...936..126A
2022/09

Constraints on the Very High Energy Gamma-Ray Emission from Short GRBs with HAWC

- Albert, A.;
- Alfaro, R.;
- Alvarez, C.
- *and 87 more*

□ 37
2022arXiv220915110A
2022/09

High Altitude characterization of the Hunga Pressure Wave with Cosmic Rays by the HAWC Observatory

- Alfaro, R.;
- Alvarez, C.;
- Arteaga-Velázquez, J. C.
- *and 64 more*

□ 38
2023NIMPA105068138K

2023/05

A double-layered Water Cherenkov Detector array for Gamma-ray astronomy

- Kunwar, Samridha;
- Goksu, Hazal;
- Hinton, Jim

The number distribution of weak Explosive Events observed by SUMER/SoHO

Mendoza-Torres, J.E., Advances in Space Research, Volume 58, Issue 10, p. 1997-2002, doi: j.asr.2016.07.032, ISSN: 0273-1177
No Citations

The solar radio emission during the minimum between the 23-24 cycles of solar activity

Mendoza-Torres, J.E., Palacios-Fonseca, J.S., Advances in Space Research, Volume 58, Issue, 1986-1990, 2016, doi:10.1016/j.asr.2016.01.024, *ISSN*: 0273-1177
No Citations

Solar Mid-Infrared Telescope

J.E. Mendoza-Torres, J.S. Palacios-Fonseca, M. Velázquez-de-la-Rosa P., Rodríguez-Montero, A. De-Roa-Campoy, E. Valadez-Campos, M.O. Arias-Estrada, J. Peña-Saint-Martin, B. Rodríguez Pedroza I. Gómez-Arista M.Juárez-Gama, K. Gottschalk and I.C. Medina-Carrillo, RMxAA, 55, pp11-16, 2019

No Citations

Implementation of Reed-Solomon Codes for stratospheric balloon probes and nano-satellites

E. Valadez-Campos, J.E. Mendoza-Torres, IJERT, 10, 512-519, 2021

No Citations

The Local Dew Point Temperature, Water Vapor Pressure and the mm-Wavelength Opacity at the Sierra Negra Volcano

Mendoza-Torres, J.E., Colín-Beltrán E., Ferrusca D., and Contreras R.J., A&A 649, A12, 2021.

No Citations

A variable sampling-time method for elliptical orbit motion prediction in nanosatellites, IEEE Access

Berenice Rodríguez-Pedroza, Miguel O. Arias-Estrada, José E. Mendoza-Torres, Vol 9, 95767, 2021, DOI: 10.1109/ACCESS.2021.3094105

No Citations

The Barometric Coefficient Dependence with the Geomagnetic Cutoff Rigidity for Different Neutron Monitors

E. Tirado-Bueno J. E. Mendoza-Torres and R. R. S. de Mendonca, Advances of Space Research, https://doi.org/10.1016/j.asr.2021.04.034

Citations A 1 B 0

2022arXiv220502154S 2022/05
First results from the ENTOTO neutron monitor: Quantifying the waiting time distribution

- Strauss, R. D.;
- Giday, Nigussie M.;
- Seba, Ephrem B.
- and 5 more

Development of a shorted interleaved Reed-Solomon Codes (siRS) for data downlink in stratospheric probes and nano-satellites

Eduardo Valadez Campos, J. Eduardo Mendoza Torres, International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249-8958 (Online), Volume-12 Issue-2, December 2022

Global Kinematics of the OH masers at W49N

Mendoza-Torres, J.E., Juárez-Gama M., RodrÍguez-Esnard, I.T., Astronomy and Astrophysics, 669, A100, 2023

Charged particle reflection in a magnetic mirror

Fernández-Ramos, L.A., Mendoza-Torres, J.E., Gómez-Flores, O., Tirado-Bueno, E., Revista Mexicana de Fisica