

Faculty position at Instituto Nacional de Astrofísica, Óptica y Electrónica (INAOE)

Application Deadline: 12th October, 2018 Selection Deadline: 15th December, 2018

The INAOE is part of CONACYT's System of Public Research Centers and its mission is the generation, advance, and dissemination of knowledge for the development of the country and humanity, through the identification and solution of scientific and technological problems and the training of specialists in the areas of Astrophysics, Optics, Electronics, Computer Science and related areas. (www.inaoep.mx).

Based on the faculties of the General Director of the INAOE, provided in article 20, section I, of the Decree that restructures the National Institute of Astrophysics, Optics and Electronics, and in order to find the best trained personnel that can contribute effectively and efficiently to the objectives of this Institute, the INAOE is seeking candidates to fill a research position in Astrophysics, starting in early 2019. We welcome applications from candidates across all areas in Modern Astrophysics. Active researchers of all nationalities are encouraged to apply. The main selection criteria are research accomplishments and potential for future success.

The Astrophysics Department of the INAOE has the mission to solve Scientific and Technological Frontier Problems in the disciplines of astrophysics and astronomic instrumentation, to form human resources specialized in these areas and spread the knowledge generated to the society through its education and outreach programs.

Researchers and graduate students of the Astrophysical Department conduct both theoretical and observational research, with their own, national and international infrastructure, covering the entire electromagnetic spectrum, from radio waves to gamma rays. The scientific interests are diverse, but are included in five branches of knowledge: extragalactic astrophysics and cosmology, galactic astrophysics, stellar astrophysics, millimeter astronomy and astronomical instrumentation. The current staff of the Astrophysical Department consist of 34 full-time researchers, 7 CONACyT chairs researchers, 3 postdoc researchers, and more than 50 Masters and Ph.D. students.

INAOE is the leading Mexican partner in the operation of the Large Millimeter Telescope (LMT, www.lmtgtm.org), and a partner of the High-Altitude Water Cherenkov Experiment

(HAWC, <u>http://hawc.umd.edu/</u>), the Large Aperture Gamma-ray-burst Observatory (LAGO, <u>http://particulas.cnea.gov.ar/experiments/lago</u>), and the 10.4m Gran Telescopio Canarias in Spain (<u>http://www.gtc.iac.es</u>). Other INAOE facilities in astronomy include a 2.12m reflector at the Observatorio Astrofísico Guillermo Haro (OAGH) in Sonora, Mexico, substantial computing resources and a research library. INAOE staff also have access to the telescopes at the Observatorio Astronómico Nacional at San Pedro Martir (OANSPM). A 6.5m telescope, which will be installed in SPM is in the design phase. It will be complemented by the similar MMT in Mt Hopkins, Arizona (<u>https://www.mmto.org</u>), as a binational observatory.

The candidates will have established an innovative research trajectory at the highest international level and an outstanding, externally funded research program. The candidate's record of excellence in research should be demonstrated by a record of impactful, sustained contributions and publications in top ranked relevant academic journals. The candidates will have demonstrated excellence in developing a teaching programs at the graduate level and significant previous experience as an effective mentor/supervisor to successful trainees including graduate students. Evidence of excellence in teaching will be demonstrated through teaching accomplishments (including supervisions of Masters and PhD students), strong letters of reference and the teaching dossier submitted as part of the application.

Applications must be written in English, and be emailed as PDF files to direccion_investigacion@inaoep.mx, and astrofi@inaoep.mx before October 12th, and include:

- Cover letter addressed to Dr. José Ramón Valdés, head of the Astrophysics Department (jvaldes@inaoep.mx)
- Curriculum vitae
- Description (max. 10 pages) of current and proposed research project including its relation to other research at INAOE, if this were the case.
- Complete publication list, with max. 5 papers particularly relevant to the application highlighted.
- · A teaching dossier, including a statement of teaching philosophy
- We will request three (3) references when applicants have made it to the final interview stage.

The entire process of selection and evaluation is expected to last about 3 months after the application deadline. The evaluation procedure will be carried out by a Selection Committee, appointed by the General Director of the INAOE, in which prominent astronomers of our community participate. The evaluation procedure will be carried out according to the following criteria:

- 1. Scientific excellence of the candidates.
- 2. Experience in managing research and infrastructure development projects.
- 3. Quality and the originality of the research project.
- 4. Matching and feasibility of the research project within the framework of the INAOE research activities and infrastructures. It is important to point out that at the INAOE we are open to the creation of new lines of research and to the contribution of new observational facilities.

Successful candidate will be notified by e-mail. Within 10 days from receipt of the communication, the candidate shall communicate whether they accept or decline the position. Failure to communicate acceptance will be considered as declining.

The main tasks of the faculty at INAOE are to undertake full-time research with a large selfdirected component and to participate in graduate training and advising of Master and Ph.D. students (in English or Spanish). Tenure-track positions are based at the INAOE in Tonantzintla, 125 km East of Mexico City and 12 km west of the city of Puebla.

Included Benefits:

- 1. Medical coverage for the staff member and immediate family.
- 2. Sabbatical Leave/Medical leave, vacation leave, maternity/paternity leave.
- 3. Retirement and pension benefits.

In accordance with internal rules, a fixed-term contract as Researcher will be offered to candidates, they will be evaluated at the end of the first and third year. The initial appointment can be made at the US-equivalent of Assistant or Associate Professor. Candidates are expected to have developed independent research for at least 3 years after finishing their PhDs.

Salary will be commensurate to qualifications and experience