



INSTITUTO NACIONAL DE ASTROFÍSICA, ÓPTICA Y  
ELECTRÓNICA DEPARTMENT OF ASTROPHYSICS  
Postdoctoral Research Assistant  
(1 appointment, fixed term)  
MXN\$ ~280000 per annum (USD ~15000), tax free

The Department of Astrophysics at Instituto Nacional de Astrofísica, Óptica y Electrónica (INAOE, [www.inaoep.mx](http://www.inaoep.mx)) invites applications for a postdoctoral research assistant position in the area of millimeter astronomy to work on the CONACyT project led by Dr. Itziar Aretxaga entitled "Deep panoramic surveys at 1.1/1.4/2.1mm with the new polarimetric camera ToI TEC".

INAOE is the leading Mexican partner in the operation of the Large Millimeter Telescope (LMT, [www.lmtgm.org](http://www.lmtgm.org)), now in scientific operation. ToI TEC (<http://toltec.astro.umass.edu/>), the new imaging camera of the LMT is currently under development and is expected to be deployed to the telescope at the end of 2018.

A large fraction of the research undertaken by the assistant is expected to be based on data acquired with this facility. The candidate is expected to contribute in the planning of the public surveys approved and to contribute to the development of the analysis pipeline, as part of an international team of researchers from INAOE and other Mexican institutions, the universities of Massachusetts-Amherst, Michigan, Northwestern, Arizona State, Wisconsin and Cardiff and NIST. The public surveys of the LMT will include a set of embedded areas of the galactic and extragalactic sky to unprecedented depths and angular resolution (<http://toltec.astro.umass.edu/science.php>).

The appointment is for 1 year commencing from January 2018, renewable to 1 extra year contingent on performance, and is based at INAOE, Tonantzintla, Pue., Mexico.

The successful candidate should have a PhD awarded within the previous 5 years in a relevant area of astronomy or astrophysics, and should have a demonstrated capacity for independent work. Desirable skills include proficiency in development of scientific coding preferably in C++ and python and experience with Data Mining and statistics, scientific interest in star formation, galaxy evolution or large scale structure of the Universe.

Applications must be written in English, and be emailed as PDF files to [itziar@inaoep.mx](mailto:itziar@inaoep.mx) before December 1st, and include:

- Cover letter addressed to Dr. Itziar Aretxaga
- Curriculum vitae, including current address, nationality, age, and date of PhD
- Description (max. 10 pages) of research interests
- Complete publication list, with a maximum of 5 papers particularly relevant to the application highlighted
- Full contact details of 3 professional references, and arrange for letters to be sent to the same address before the deadline.