



## **POSTDOCTORAL POSITIONS AND FELLOWSHIPS IN ASTROPHYSICS**

**Instituto de Astronomía, UNAM (IA-UNAM)**

### **DEADLINE**

July 25, 2025

### **JOB DESCRIPTION**

The Instituto de Astronomía, Universidad Nacional Autónoma de México (IA-UNAM), invites applications for:

1. Two postdoctoral research associate (PRA) positions starting in November 2025 for a period of two years at the Mexico City campus. The positions involve working on:
  - a) Mexican participation in the Vera Rubin Observatory LSST collaboration in one or more of the following three themes: Strong gravitational lensing, focusing on dark matter science and cosmology (experience in lensing data analysis and machine learning required); Low surface brightness science, focusing on cosmological numerical simulations and/or data analysis from galaxy/cluster observations; Time domain astrophysics, with experience in data analysis and machine learning techniques. Successful candidates will join the relevant LSST working groups and will have ample opportunity to interact with researchers from partner institutions.
  - b) Galaxy evolution, with a focus on the high-redshift Universe from observational and/or theoretical perspectives. Successful candidates are expected to conduct high-quality research on the galaxy-AGN-halo coevolution by applying state-of-the-art software analysis tools and techniques to data from large multi-wavelength galaxy surveys, as well as imaging/spectroscopy data from HST, JWST, Euclid, DESI, etc. or by using MHD cosmological simulations and other theoretical modeling approaches. They are also expected to collaborate closely with IA-UNAM researchers and students on ongoing projects related to extragalactic astronomy and cosmology.

2. Postdoctoral fellowships in Astrophysics from DGAPA-UNAM at IA-UNAM in México City or Ensenada, Baja California campi for one year, starting in March 2026, renewable for a second year depending on performance. Applications should not be submitted to more than one institute or campus of the UNAM. Fellows are expected to carry out original research in any area of Astrophysics, collaborating with IA-UNAM researchers and students. The main selection criteria are outstanding research accomplishments and promise of future achievement.

Postdocs will have competitive access to the Observatorio Astronómico Nacional in San Pedro Mártir, Baja California, the Observatorio Astronómico Guillermo Haro in Sonora, and the Large Millimeter Telescope Alfonso Serrano in Puebla, as well as access via collaboration to several international projects (for more details, see [here](#)). In addition, the Institute has extensive computing facilities and members of the Institute have access to UNAM's general supercomputers. IA-UNAM provides funding for publications and some support for travel and observation.

#### **APPLICATION PROCEDURES**

- 1) Interested applicants for PRA positions can find more details and the application instructions here:

<https://astronomia.unam.mx/PosdocsResearchAssociates-Instructions.pdf>

- 2) Interested applicants for DGAPA-UNAM postdoctoral fellowships must contact an IA-UNAM researcher to define a joint research project. Full lists of faculty members and their research interests are available for the Mexico City campus [here](#) (researchers are organized into four departments) and for the Ensenada campus [here](#). For more details and the application instructions, see here:

<https://astronomia.unam.mx/PosdocsDGAPA-Instructions.pdf>

The IA-UNAM is an equal-opportunity employer. We encourage, in particular, applications by women and by members of minorities.

#### **SALARY AND BENEFITS**

1. For PRA positions, the salary is equivalent to that of a junior associate professor (Investigador Asociado C) as determined by UNAM, and includes bonus programs. The government provides standard health insurance, and UNAM provides insurance for major medical expenses.

2. For DGAPA-UNAM fellowships, the monthly stipend is 32,000 MXN pesos per month in IA-Mexico City and 35,000 MXN pesos in IA-Ensenada (free of taxes). Major medical expense insurance is provided.

In both cases, some funding is available for conferences and collaborations.

Inquiries about this job posting should be e-mailed to Dr. Vladimir Avila-Reese, Head of Academic Affairs at [convocatorias@astro.unam.mx](mailto:convocatorias@astro.unam.mx)