

# Call for two Tenured Researcher Positions in the Astrophysics Department of the National Institute of Optical and Electronic Astrophysics (INAOE)

The National Institute of Astrophysics, Optics and Electronics (INAOE) is a Public Research Center of CONACYT located in Puebla, Mexico, which conducts basic and applied research. It has postgraduate programs in the areas of Astrophysics, Optics, Electronics, Computer Science, Space Science and Technology, and Biomedical Science and Technology belonging to the National Postgraduate System (SNP). INAOE provides an intellectually stimulating work environment in which frontier research and high quality technological development are carried out and graduate studies at the master's and doctoral levels are offered.

INAOE's Astrophysics Department aims to solve scientific and technological frontier problems in the disciplines of astrophysics and astronomical instrumentation, to train specialized human resources in these areas, and to disseminate the knowledge generated to society through its education and outreach programs. Researchers and graduate students of the INAOE Astrophysics Department carry out research, both theoretical and observational, with its own, national and international infrastructure, covering the entire electromagnetic spectrum, from radio waves to gamma rays. The scientific interests are diverse, but are encompassed in six branches of knowledge: Extragalactic Astrophysics and Cosmology, Galactic Astronomy, Stellar Astrophysics, Millimeter Astronomy, High Energy Astrophysics and Astronomical Instrumentation. The current staff of the Astrophysics Department consists of 33 full-time researchers, 10 CONACyT researchers, 4 postdoctoral researchers and more than 50 master and doctoral students. INAOE is the leading Mexican partner in the operation of the Large Millimeter Telescope (LMT, www.lmtgtm.org), and partner of the High-Altitude Water Cherenkov Experiment (HAWC, http://hawc.umd.edu/), the Large Aperture Gamma-ray-burst Observatory (LAGO, http://particulas.cnea.gov.ar/experiments/lago), and the 10.4m Gran Telescopio Canarias in Spain (http://www.gtc.iac.es). Other astronomical facilities at INAOE include a 2.12m reflector at the Observatorio Astrofísico "Guillermo Haro" (OAGH) in Cananea, Sonora (Mexico), significant computing resources, and a research library. INAOE personnel also have access to telescopes at the Observatorio Astronómico Nacional in San Pedro Mártir (OANSPM). A 6.5m telescope, to be installed at the OANSPM, is in the design phase. It will complement the MMT at Mt. Hopkins, Arizona (https://www.mmto.org), as a binational observatory.

Based on the faculties of the Director General of 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 candidates who can contribute effectively and efficiently to the objectives of this Institute, a call is issued to nationals or foreigners interested who wish to obtain two appointments of researcher for a specific work and time period (for a period of one year), starting January 2023, in terms of the provisions of Article 24, section I, of the INAOE Academic Staff Statute, to develop scientific and technological research, as well as technological development and innovation linked to the various sectors that demand it, in addition to training high-level human resources, to send their application in accordance with the following









# **Bases**

#### I. Academic Formation

A PhD. degree or equivalent in Astrophysics or related areas is required, as well as a successful research career with publications in the best international conferences and journals in their area of research. Candidates are expected to have conducted independent research for at least three years after completion of their PhD...

# II. Candidate profile

Candidates must have established an innovative research trajectory at the highest international level and an outstanding research program. The candidate's record of excellence in research should be demonstrated by a record of high impact and sustained contributions and publications in relevant leading academic journals. It would be advantageous for the candidate to demonstrate excellence in the development of graduate level teaching programs and significant prior experience as an effective mentor/supervisor of graduate students. Evidence of teaching excellence will be demonstrated through teaching accomplishments, strong letters of recommendation, and the teaching record submitted as part of the application..

#### III. Functions

The selected candidate should:

- Conduct high quality and original research;
- Publish the results of his/her research in the best conferences and journals in his/her area of expertise;
- Collaborate with other researchers of the Astrophysics Department and INAOE;
- To teach high quality courses in INAOE's postgraduate programs;
- Supervise master's and doctoral theses;
- Participate as reviewer of master's and doctoral theses directed by other researchers;
- Perform administrative duties in accordance with his/her position;
- Collaborate in different activities of our institute.

# IV. Additional considerations

- Availability to live in or near Puebla City, Puebla, Mexico.
- Positive attitude towards challenges and work in general.
- High sense of responsibility.
- Willingness to work as part of a team.
- In the case of foreigners, they must have valid immigration documents that allow them to perform the academic activities and all those described in the body of this call, derived from the possible relationship with INAOE

### V. Process

Applicants to obtain the appointment of Tenured Researcher under the terms indicated above must present:

• A letter of motivation









- A medium-term (10 years) projected research proposal of a maximum of 10 pages that includes professional development, teaching and scientific and technological development objectives, pointing out the main scientific contributions and outlining how they plan to integrate with the current researchers of the Coordination of Astrophysics and INAOE.
- Curriculum Vitae.
- Complete list of publications with a maximum of 5 articles indicated as particularly relevant to the application.
- A teaching dossier, including a statement of teaching philosophy.
- Three letters of recommendation from internationally recognized researchers.

The requested documents must be submitted or sent by the applicants to the Research and Technological Development Department, to the following address, before November 04, 2022:

# Dirección de Investigación y Desarrollo Tecnológico

Instituto Nacional de Astrofísica Óptica y Electrónica (INAOE) Calle Luis Enrique Erro 1,
Tonantzintla, Puebla, México
C.P. 72840
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direccion investigacion@inaoep.mx

The entire evaluation and selection process is expected to take about 2 months after the deadline for submission of applications. The evaluation procedure will be carried out by a Selection Committee, appointed by the Director General of INAOE, in which prominent astronomers of our community participate. The evaluation procedure will be carried out according to the following criteria: academic excellence of the candidates, experience in the development of research and technological development projects, quality and originality of the research project presented, and appropriateness and feasibility of the research project within the framework of INAOE's research activities and infrastructure. It is important to note that at INAOE we are open to the creation of new lines of research and the contribution of new observational facilities.

The selected candidate will be notified by e-mail. Within 10 days from receipt of the communication, the candidate must communicate whether he/she accepts or declines the position. Failure to communicate acceptance will be considered as a declination. The opinion of the staff of the Astrophysics Department will be sent to the Director General so that, once the conditions foreseen in the Statute of the Academic Staff of the National Institute of Astrophysics, Optics and Electronics are fulfilled, the corresponding appointment will be granted according to the provisions of article 24 fraction I of the current Statute of the Academic Staff (EPA). The positions will be available until they are filled.

#### VI. Additional information

Participants are informed that after the one-year period referred to in this call, the permanence, promotion and, if applicable, the definitive appointment will be determined according to the procedures and regulations set forth in the Academic Staff Statute (EPA) of the National Institute of Astrophysics, Optics









and Electronics and other applicable provisions. The positions offered are full time with an appointment and salary commensurate with the academic career. The position includes the following benefits: social security for the researcher and his/her immediate family, medical leave entitlement, vacation entitlement, maternity/paternity leave, as well as retirement and pension benefits. In accordance with internal rules, candidates will be offered a fixed-term contract as a researcher, which will be evaluated at the end of the first and third year.

The initial appointment may be equivalent to that of an assistant or associate professor in the United States. In addition to their salary, INAOE researchers receive compensation for their performance and benefits above those required by law. They may also receive the stimulus granted by the National System of Researchers if they qualify for admission. As part of the benefits, researchers may, with prior authorization, take up to three months a year to visit other academic institutions, as well as enjoy a sabbatical year every six years.

