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# Atracción de Jóvenes Profesores Investigadores



## CALL FOR APPLICATIONS: FULL-TIME TENURE TRACK FACULTY POSITION IN THE SCIENCES DEPARTMENT, PHYSICS SECTION, EXPERIMENTAL HIGH-ENERGY PHYSICS AREA

The Department of Sciences (DAC) at the Pontifical Catholic University of Peru (PUCP), within the framework of the Young Faculty Attraction Program (Tenure Track), invites applications for a faculty research position in the Physics Section. Applicants must hold a Ph.D. in physics or related fields and specialize in the experimental (hardware) high-energy physics area.

**Application Deadline: Friday, August 30, 2024**

Applicants (preferably under 40 years old) must hold a Ph.D. in Physics from a prestigious university.

The desired profile focuses on theory/phenomenology of neutrinos and astroparticles. The HEP group researches topics such as heavy neutrino signals, tests of physics beyond the Standard Model through neutrino oscillations or interactions, cosmic ray propagation, characterization of cosmic ray and gamma ray showers, and the detection of long-lived particles in colliders.

The required profile is oriented towards hardware development. The successful candidate is expected to lead the establishment of the new high-energy physics laboratory and additionally participate in any of the following experiments (ALICE, DUNE, SWGO, TAMBO). The High-Energy group investigates, among other topics: diffractive cross-section in ALICE, neutrino physics beyond the Standard Model (BSM) in DUNE simulations, gamma-ray energy reconstruction and gamma/hadron separation for SWGO, and the development of an experimental setup and simulation for TAMBO. We also conduct low-cost particle detection tests using CMOS technology and GEANT4 simulations. More details can be found at our webpage: <https://investigacion.pucp.edu.pe/grupos/hep/>

The selected candidate will serve as a faculty member and researcher in the Science Department - Physics Section at PUCP, with a commitment of forty (40) hours per week, including research, teaching, and academic-administrative tasks (e.g., thesis committees, commissions).

### Requirements:

- A Ph.D. in Physics from an internationally recognized program.
- Preferably three or more years of postdoctoral experience.
- A strong publication record in indexed journals Q1 and Q2 (Web of Science and

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Scopus), excluding proceedings. A competitive record would be six publications in the last six years in Q1 or Q2 quartiles.

- Presentation of two or more papers/posters at peer-reviewed international academic conferences related to the area of specialization in the last three years.

## Commitments for the 3-year Contract Period:

### 1. Research Commitments:

- High-quality academic output in indexed journals (Scopus or Web of Science Q1/Q2): a minimum of six publications with PUCP affiliation during the evaluated period.
- Disseminate research in peer-reviewed academic conferences with international scientific committees (in-person or virtual): participation in at least one conference annually on average.
- Participate in the HEP research group activities, collaborating on ongoing projects.
- Serve as a researcher on at least one project submitted for external funding.

### 2. Teaching Commitments:

- Teach the equivalent of 10 lecture hours per year, with at least 3 at the undergraduate level (average 5 hours per week per semester) across undergraduate and/or graduate courses.
- Supervise undergraduate and/or graduate theses, ensuring at least one thesis defense.
- Achieve high performance as evaluated through the Teaching Opinion Survey, with high scores in student evaluations.

### 3. Other Commitments:

- Affiliation: The professor must indicate PUCP affiliation in all publications and presentations during the contract period.
- Exclusivity: The professor agrees to teach only at PUCP during the contract period, except as a guest lecturer or visiting researcher.

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## About the University and the Department of Sciences:

Founded in 1917, PUCP currently has nearly 30,000 undergraduate and graduate students. Its modern facilities span over 40 hectares in Lima. PUCP is institutionally accredited by the International Institute for Quality Assurance (IAC-CINDA) and ranks as the best in the country and tenth in Latin America according to the Quacquarelli Symonds (QS) World University Rankings 2023.

Founded in 1966, the Science Department comprises faculty from the Physics, Mathematics, and Chemistry Sections, with well-equipped teaching and research laboratories.

## Benefits for Successful Candidates:

- Sixty (60) days of vacation.
- Annual bonuses for scientific publications, contingent upon meeting publication requirements.
- Annual bonuses for good teaching performance.
- Financial support for presenting papers at international conferences (registration, travel, and per diem).
- Possibility of access to funding for research projects through the Annual Projects Contest –CAP (excluding researcher remuneration).
- Discounts on university courses and programs.
- Access to supplementary health insurance (EPS).

## Required Documentation:

Interested applicants who meet the profile and requirements can submit the following documents digitally **by August 30, 2024**, to [dac.convocatoria@pucp.edu.pe](mailto:dac.convocatoria@pucp.edu.pe) indicating "**Tenure Track: HEP Experiment - LAST NAME**" in the subject line.

1. Curriculum Vitae in English or Spanish
2. Scanned copies of degrees and titles obtained.
3. A cover letter (maximum 2 pages) addressed to the Head of the Department of Sciences, Dr. Jorge Moreno Ruiz, including:
  - a. Academic background
  - b. Current position and institution
  - c. Description of research line

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- d. Major academic and professional achievements
- e. Interests and motivations for applying
- f. List of attached documents
4. Research Statement (maximum three pages) including:
  - a. Summary of research, highlighting the most representative works
  - b. Future research projects at the university if selected
  - c. Synergy with the HEP group research areas,
  - d. Academic links that could lead to collaborative projects
5. Three recommendation letters from researchers or university professors with whom the applicant has worked.

The CV and required documents must be submitted **in a single PDF file**.

PUCP promotes gender equality in academia. Female candidates meeting the requirements are encouraged to apply.

## Evaluation Process:

The evaluation will be conducted by a five-member jury, including three professors from the Department of Sciences (two from the area and one from another area) and two external evaluators from prestigious international universities. The evaluation process aims to select the most suitable candidates and will focus on teaching and research, comprising three stages:

1. Review of submitted documents.
2. Evaluation of teaching and research competencies through two consecutive seminars: presentation of representative research work, a research proposal, and assessment of academic capabilities in a personal interview. Sessions may be conducted virtually if necessary, with a schedule agreed upon with candidates.
3. Psychological evaluation by specialists, not part of the scoring.

## Contact:

For inquiries, please contact at [dac.convocatoria@pucp.edu.pe](mailto:dac.convocatoria@pucp.edu.pe) with the subject "Questions: Tenure Track- LAST NAME".