

Three Tenure-track Theory Positions in Particle Astrophysics, Cosmology and Physics at Astrocent

Junior (leads to Senior) or Senior (permanent)

Deadline on Feb 15, 2025

Job description:

Astrocent – *Particle Astrophysics Science and Technology Centre* invites applications for up to three tenure-track positions to conduct research at an internationally competitive level in theoretical particle astrophysics, cosmology and physics. Our goal is to appoint theoretical physicists with an excellent research record in the above fields, primarily, although not exclusively, in the areas of: neutrinos, dark matter and gravitational waves. An ability to conduct interdisciplinary research and to relate to the experimental activities Astrocent is also highly desirable.

The positions could start any time starting from early Spring 2025 after the winners are selected by an international recruitment panel. Generous funding allowing to offer internationally competitive salaries, will for the first six years be provided by a prestigious grant Teaming for Excellence and local co-funding for the total of 30 million Euro. During that period the successful candidates are expected to build up their groups and generate further research funding. Their research progression will be periodically evaluated, with the final tenure-track review planned in 2029.

The advertised positions will form a nucleus of a new theory group at Astrocent. The most promoted areas will be: matter, neutrinos and gravitational waves in the context of particle theory, early Universe cosmology and inspiration for Astrocent's experimental involvement. The group will initially be led by Astrocent's director, Prof. Leszek Roszkowski.

Astrocent was created in 2018 as an autonomous Centre of Excellence at the internationally-leading Nicolaus Copernicus Astronomical Center of the Polish Academy of Sciences, with its own budget and International Scientific Committee. It quickly gained significant international recognition and now plays an important role in some of the major international experiments in dark matter (DarkSide, DEAP-3600), neutrinos (Hyper-Kamiokande, KM3Net), and gravitational wave research (Virgo, Einstein Telescope) that it is a member of. The development and application of scientific computing methods and theoretical research in particle astrophysics complemented its experimental and technological activities. More information can be found at <https://astrocent.camk.edu.pl/>.

Astrocent researchers have developed a wide range of leading collaborators both in Poland (Warsaw University, Jagiellonian University, National Centre for Nuclear Research, Łukasiewicz Network of research institutes, etc.) and abroad (groups at AstroParticle & Cosmology (APC) Laboratory, Princeton University, McDonald Institute, Gran Sasso Science Institute, DESY, etc). It is expected that the theory group will further enhance Astrocent's international dimension and standing by contributing to cutting-edge research and training PhD students in an international environment.

It is planned that around 2026 Astrocent will become an independent institution. Until December 2030 it will continue to be funded by the Teaming for Excellence grant. It is expected that, during that period, Astrocent will successfully develop its research activities and support structures in order to secure the highest level of government support and significant research grants (normally two main sources of funding) and reach the level of an international leader in the field. Astrocent will be the first institute primarily focused on astroparticle physics and related areas of physics and technology, the first of its kind in Poland and the Central-Eastern side of Europe.

Essential Qualifications:

1. A PhD in theoretical particle physics or a closely related field;
2. Excellent proficiency in English language;
3. Outstanding academic records, including a record of internationally-leading frontline research and high-quality publications in top-tier journals;
4. Demonstrated potential for securing external research funding.

Helpful Qualifications:

Experience in teaching and mentoring students.

What We Offer:

1. Competitive, international-level salary until December 2030 (with a final tenure-track review in 2029) in the range of the equivalent of 4300 Euro to 5000 Euro gross per month, depending on seniority and relevant experience;
2. Astrocent funding-aided private health-care plan;
3. Access to world-class computing resources and research facilities;
4. Opportunities for collaboration with international research centers;
5. Support for professional development, conference travel, and research funding opportunities.

Applications should be sent to recruitment@camk.edu.pl and include:

1. Research statement;
2. CV;
3. Summary of research career, including a list and brief description of most significant achievements;
4. List of publications;
5. Copy of PhD degree;
6. 3 or 4 letters of recommendation.
7. GDPR declaration downloadable from https://www.camk.edu.pl/en/media/uploads_current/o_institucje/ochrona_danych/astrocent/gdpr_declaration_eng_teaming.pdf

For further details, please send an email to:

Prof. Leszek Roszkowski astrocent.head@gmail.com

Deadline: 15 February 2025

Fulfilling the obligation arising from Article 24(6) of the Act of June 14, 2024, on the Protection of Whistleblowers (Journal of Laws, item 928), NCAC PAS wish to inform about the possibility of reporting a violation and provides the communication channels described in the internal reporting procedure, available at the following address: <https://www.camk.edu.pl/en/about/whistleblowers/>.

Contact: Leszek Roszkowski (astrocent.head@gmail.com)

Letters of Reference should be sent to recruitment@camk.edu.pl