Fabian Schüssler<br>IRFU / CEA Paris-Saclay<br>Saclay, February 2024

## Postdoc position: Multi-messenger transients with Astro-COLIBRI

The High-Energy Astroparticle Physics group of the Particle Physics Department of IRFU / CEA Paris-Saclay is inviting applications for a Postdoctoral Research Position, set for two years with the possibility of extension. The position is focused on multi-messenger studies in the context of the Astro-COLIBRI platform.

As part of the "Multi-messenger Observations of the Transient Sky" (MOTS) project, backed by the French National Research Agency, the successful candidate will participate in the development of Astro-COLIBRI, a novel software framework that provides easy access to information about multi-wavelength and multi-messenger transient phenomena. The role also offers the opportunity to contribute to the science program of the H.E.S.S. and CTA/LST VHE gamma-ray observatories, the SVOM mission and to exploit other multiwavelength or multi-messenger opportunities.

Prospective candidates must hold a PhD in astroparticle physics or astrophysics, with a pronounced interest in software development, experimental data interpretation, and physics analysis. Proficiency in Python is essential, and experience in web or app development is advantageous. We, a dynamic and international team, are particularly keen on increasing female representation in our field and strongly support applications from women in our quest for diversity, excellence, and innovation.

The two-year position begins in mid-2024, with funds allocated for conference travel and equipment. The search will continue until the right candidates are selected. However, we strongly encourage interested applicants to submit their applications by March 2024 to be considered in the initial round of evaluations.

Please submit the following to Fabian Schüssler at fabian.schussler@cea.fr and refer to the Postdoc Application Guidelines for further details:

- Curriculum Vitae, including a selected bibliography to showcase personal contributions
- A statement outlining main research interests
- Contacts of at least two senior scientists from whom letters of reference may be requested

With about 700 employees, IRFU is the largest fundamental research institute of CEA, in the heart of the emerging Paris-Saclay University, 40 km south of Paris. It covers major science fields in particle and nuclear physics and astrophysics, with a strong participation in instrumentation. DPhP comprises about 110 physicists working on scientific themes including elementary components of matter at the highest energies at the CERN LHC collider, R\&D for future accelerators, instrumentation, study of antimatter, neutrino physics, gamma-ray astronomy, study of gravitational waves, and observational cosmology. The high-energy astroparticle physics group consists of about ten scientists with expertise in dark matter, primordial black holes and transient sources. Among many activities, the group leads the transient and multi-messenger activities within the H.E.S.S. collaboration, participates in the upcoming SVOM mission and is heavily involved in the preparation of the Cherenkov Telescope Array.

More information:

- Irfu: http://irfu.cea.fr
- Irfu Particle Physics department: http://irfu.cea.fr/DPhP/en/
- MOTS: https://anr-mots.fr
- Astro-COLIBRI : https://astro-colibri.science
- Fabian Schüssler: https://www.multimessenger-astronomy.com

