



The gamma-ray astronomy group at [Laboratoire Leprince Ringuet](#) (LLR<sup>1</sup>), based at Ecole Polytechnique in the Paris region, has an opening for a postdoctoral researcher to work on the [H.E.S.S.](#)<sup>2</sup> and [CTA](#)<sup>3</sup> experiments, state-of-the-art facilities aimed at the study of the most energetic sources of radiation in the Universe. The group has a long history in gamma-ray astronomy, having developed the mechanical structures of the H.E.S.S. cameras and the Fermi calorimeter. LLR scientists are involved in H.E.S.S., CTA and [Fermi](#)<sup>4</sup>, studying galactic and extragalactic sources, including pulsars, binary systems, supernova remnants and active galactic nuclei. Group members have led the development of advanced analysis and calibration algorithms for ground and space-based instruments (e.g. Model++ and Model3D for H.E.S.S., and Pass 8 for Fermi).

LLR is involved in the development of NectarCAM, a large-field-of-view camera for CTA, and has responsibility for the mechanical design and calibration of the instrument.

The successful candidate will be primarily involved in the exploitation of data from the array of five H.E.S.S. telescopes, and, in particular, from the H.E.S.S.-II telescope, the largest gamma-ray telescope in the world. The candidate will be expected to contribute to the scientific output of the group, working on the analysis of galactic and/or extra-galactic sources of gamma rays, depending on his/her interest. Candidates interested in the science of the galactic diffuse emission are particularly encouraged to apply. The candidate will also contribute to the development of the CTA experiment, most likely to the development of the data-analysis framework.

A PhD or equivalent in physics or astronomy is a requirement, and good knowledge of programming (in particular C++, Python and ROOT) is highly desirable. Funding for this position comes from the French research agency CNRS through its particle and nuclear physics institute, IN2P3. The initial contract will be for 2 years and can start as early as October 2017. Gross monthly salary will be in the range from €2,590 to €2,990 depending on experience.

To apply, or for further information, please contact Mathieu de Naurois ([denauroi@in2p3.fr](mailto:denauroi@in2p3.fr)), Stephen Fegan ([sfegan@llr.in2p3.fr](mailto:sfegan@llr.in2p3.fr)) and Deirdre Horan ([deirdre@llr.in2p3.fr](mailto:deirdre@llr.in2p3.fr)). Applicants should send a CV and a brief statement of research interests, and should arrange for two letters of recommendation to be sent on their behalf.

<sup>1</sup> <http://www.llr.in2p3.fr/>

<sup>2</sup> <https://www.mpi-hd.mpg.de/hfm/HESS/>

<sup>3</sup> <http://www.cta-observatory.org/>

<sup>4</sup> <http://fermi.gsfc.nasa.gov/>