

Postdoctoral Position in Cosmology

The Laboratoire d'Annecy-le-Vieux de Physique des Particules (CNRS/IN2P3 - LAPP) has an immediate opening for a post-doctoral research position in cosmology in the framework of ASTERICS (http://asterics2020.eu/), a project funded within the Horizon 2020 program of the European Commission.

The postdoc will work within the Large Synoptic Survey Telescope project and the Dark Energy Science Collaboration at the interface between science and data management. LSST will produce 15 TB of images of exquisite quality every night during at least ten years. These images will ultimately constitute the main dataset to understand the origin of the Dark Energy through several complementary cosmology probes. Solving the Dark Energy puzzle will require an unprecedented understanding of any systematic effect impacting the image quality as well as novel algorithms and pipelines to efficiently process the enormous amount of data produced with the required precision.

Several precursor projects (CFHT/Megacam, Subaru/(Hyper)SuprimeCam, DeCAM) are already providing smaller datasets that can serve as training samples to develop and improve the pipelines and test novel computing environments. Among other products, the database which is being developed in LSST will be a critical component of the data analysis, it is therefore necessary to test early prototypes to make sure that the design will scale with the data volume while providing high quality results to science queries.

We are seeking candidates with a good knowledge of the cosmology field and a strong bias toward code development and computing infrastructure optimization. The position is available immediately for a period of two years. The salary will depend on the working experience of the selected candidate.

The evaluation of the applications (a single pdf file with cover letter, CV including publications, research statement, email addresses of three people who can provide letters of recommendation) will start immediately, and will continue until the position is filled. The application documents as well as further questions shall be directed to Dominique Boutigny, boutigny@in2p3.fr.



