



Two Postdoc Positions at CEA Saclay

Astronomical Data Analysis

Applications are invited for two postdoctoral positions in signal processing/data analysis for an initial period of 2 years, with the UnivEarthS LabEx program.

The astrophysics division of CEA Saclay is offering two positions to work with Professor Stéphane Corbel on radio transients and Jean-Luc Starck. Over the next decade, a combination of increased sensitivity, larger field of view, and algorithmic developments will open up the time domain to a wide range of astronomical fields, from stellar flares and supernovae to neutron-star and black-hole births, quakes and instabilities. Radio astronomy is leading this effort and transient science is identified as a key goal for LOFAR (Europe), ASKAP (Australia) and MeerKAT (South Africa), the precursor instruments of the major international SKA facility to be developed for 2020.

The applicant will work in one of these related topics:

- Transient search in one of the affiliated key projects: TKP (LOFAR), ThunderKAT (MeerKAT), VAST (ASKAP),
- Optimization of current methods and development of near real-time detection pipelines,
- Characterization of transients and identification at other wavelengths.
- Image reconstruction from under-sampled Fourier measurements.

Minimum qualifications include an undergraduate degree or higher in astronomy, physics, computer science, statistics, or related field.

The candidate must have a strong motivation in developing statistical methods and applying them in large international projects.

CEA Saclay is located 25km south of Paris, near Universities and other research centers. The astrophysics division gathers more than 150 faculty and staff members, studying a large range of astrophysical problems.

The positions are initially for two years and the starting dates should be between early Fall 2011 and early 2012. Ample funding for conferences, collaborations, personal equipment and publication is available. Applicants should submit by email resume, bibliography and a brief research plans to Stéphane Corbel (stephane.corbel@cea.fr) and Jean-Luc Starck (jstarck@cea.fr), and arrange for three reference letters to be sent as well before 31 August 2011.