

Call for applications for a NenuFAR post-doctoral fellowship at Paris Observatory

Post Date: May 16, 2016

Application Deadline: June 16, 2016

Job Category: Post-doctoral Positions and Fellowships

Institution/Company Name: Paris Observatory

Institution Classification/Type: Research Laboratory

Attention To: Guy PERRIN

Title: Vice-president of the Scientific Council

Organization: Paris Observatory

Street Address: 61, avenue de l'Observatoire

City: Paris

Zip/Postal Code: 75014

Country: France

Email: secretariat.cs@obspm.fr

Email Address for Inquiries: vp.cs@obspm.fr

Related URLs:

website of Paris Observatory: <http://www.obspm.fr/?lang=en>

website of NenuFAR: <http://nenufar.obs-nancay.fr>

website of Nançay Radioastronomy station (USN): <http://www.obs-nancay.fr>

Job Announcement Text:

Paris Observatory solicits applications for one post-doctoral fellowship aimed at helping the French community to commission and start exploitation of the “New extension in Nançay upgrading LOFAR” (NenuFAR).

LOFAR is a European Low Frequency (LF) Radio phased array and interferometer, in scientific operation since 2012, run by the International LOFAR Telescope consortium in ASTRON (NL). It consists of ~50 sub-arrays (“stations”) distributed across Europe, and observes in the range 30-250 MHz.

NenuFAR is a new large LF (10-85 MHz) radiotelescope presently in construction at the Nançay Radioastronomy station of Paris Observatory, that will be both a large extension of LOFAR (a “super station”) and a standalone facility, gathering some ~2000 antennas. As a standalone LF radiotelescope, NenuFAR will be operated both as a beamformer and as an imager. The beamformer mode will be operational in 2016, and the imager mode should be built and commissioned in 2017-18. A non-limitative description of the scientific

objectives of this new instrument, an “SKA pathfinder”, can be found at http://nenufar.obs-nancay.fr/IMG/pdf/nenufar-science-case-v5_2014_10_10_pz.pdf.

Paris Observatory is one of the largest astronomical centers in the world with 600 permanent staff out of a total of 1000 personnel, and 800 publications per year. It comprises one third of French astronomy, with teams covering a wide range of fields and participating in the largest instrumental, theoretical/numerical and experimental projects of modern astronomy. It is part of a rich astronomical environment in the Paris area, comprising about 600 scientists. Paris Observatory is located on three sites: Paris, Meudon (~5 km south west of Paris), and Nançay. The Nançay Radioastronomy station is located ~200 km south of Paris, in Sologne (Cher), and has a permanent technical staff of 45 people.

The post-doctoral fellow will be appointed for 2 years, starting on September 1, 2016. The exact date is negotiable, however, the appointment is expected to end on August 31, 2018, regardless of the starting date. The salary is function of the experience, and in any case above 2,100€ monthly gross salary, subject to French taxes. Approximately 50% of the time will be available for the applicant’s personal astronomical research. The successful applicant will be hosted by one of the two scientific departments of Paris Observatory with strong connection with NenuFAR, namely LESIA or GEPI. Collaborative projects with scientists of the host department, focusing on the exploitation of NenuFAR and LOFAR, are strongly encouraged. The remaining 50% of the time will be devoted to commissioning, testing and calibrating NenuFAR, preparing the scientific exploitation by the French community and beyond. This service will be carried out in close coordination with Nançay and other involved personnel of Paris Observatory. The post-doctoral fellow is expected to share his time between Nançay and Paris/Meudon.

Fellowships are open to applicants of any nationality. Applications must include:

- A CV (1 page maximum);
- A research program including a detailed plan for the first year (4 pages maximum);
- A description of how the applicant’s skills and experience can be directed toward community tasks for the benefit of French users of NenuFAR;
- A complete list of publications and a separate list of first-author publications;
- The PhD certificate or, if not yet earned, the date of defense;
- A reference letter from a scientist outside Paris Observatory;
- A support letter from the hosting scientist at LESIA or GEPI.

Applications must be submitted electronically by **June 16, 2016** to the chair of the selection committee, Guy Perrin (secretariat.cs@obspm.fr). The application must consist of a single PDF file, not to exceed 2 Mbytes. A ranking will be published by the Scientific Council of Paris Observatory by **July 1st, 2016**.