

Postdoctoral position at CEA Paris-Saclay - Modeling the dust properties of the Milky Way and the Magellanic Clouds

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Posting date: September 1, 2024
Closing date: November 8, 2024

The *Department of AstroPhysics* (DAp), which is part of the *Institute of Research into the Fundamental laws of the Universe* (IRFU) at CEA Paris-Saclay, invites applications for a postdoctoral research position to work on the dust properties of the Milk Way and the Magellanic Clouds.

The French ministry is funding the ANR REDEEMING, with two PostDoc positions, one at CEA Paris-Saclay and one at IRAP Toulouse, to help in the analysis of multi-wavelength data and in the design of a properly-constrained metallicity-dependent interstellar dust model. The PostDoc at CEA, to which this announcement is addressed, will be working with Frederic GALLIANO (CEA) and the REDEEMING consortium. The work will consist in collecting, homogenizing and modeling an heterogeneous set of data, with state-of-the-art optical properties of realistic grains. The ideal candidate has experience in observational or modeling studies of the ISM at ultraviolet or infrared wavelengths, with a focus on continuum emission of dust. Experience with Bayesian model fitting and knowledge of a programming language such as Python and / or Fortran are strong assets. Candidates must have completed a PhD prior to the beginning of the position. Review of applications will begin in December 2024. The search will continue until the position is filled.

The PostDoc grant is for **three years**, and is expected to start in September / October 2025. Applications should be sent as **one PDF** file to Frédéric GALLIANO, and should include:

1. a cover letter indicating motivation and qualifications;
2. a curriculum vitae with a list of publications;
3. a short research statement;
4. the name of two referees who could provide letters of reference.

Inquiries should be addressed to Frédéric GALLIANO (frederic.galliano@cea.fr) and Nathalie YSARD (nathalie.ysard@cnrs.fr).

CEA Paris-Saclay is located 20 km south of Paris, France, in the vicinity of various universities and other research centers. The Paris region contains numerous research institutes with whom the DAp collaborates (*e.g.* IAP, IAS Orsay, Observatory of Paris-Meudon, APC). DAp gathers more than 100 faculty and staff members, 50 postdoctoral fellows, and 30 PhD students. DAp offers a lively and very active research environment of the highest international standards. The research at DAp covers many areas of observational, theoretical, and applied astrophysics. Generous funding for conferences, collaborations, personal equipment and publications is available. The salary for this position will depend on the experience of the candidate, and includes excellent health insurance, social security benefits, and family support.

For more information on the hiring institute, see the web pages of DAp (<https://irfu.cea.fr/dap/>), and CEA Paris-Saclay (<http://www-centre-saclay.cea.fr/en>).