



monsite : libelle complet de l unite  
Saclay

## postdocs

**Spécialité** Instrumentation

**Niveau d'étude** Bac+5

**Formation** Post-Doc

**Unité d'accueil**

**Candidature avant le** 01/05/2021

**Durée** 4 ans

**Poursuite possible en thèse** non

**Contact** [Maury Anaelle](#)  
+33 1 69 08 99 87  
[anaelle.maury@cea.fr](mailto:anaelle.maury@cea.fr)

## Résumé

postdoctoral positions are currently being opened in France, in CEA-Saclay and in IPAG-Grenoble

## Sujet détaillé

<https://jobregister.aas.org/ad/5e7aa1bf>

## Mots clés

## Compétences

## Logiciels

---

## postdocs

### Summary

The ERC synergy project “ECOGAL: aims at building a unifying predictive model of star and planet formation in the Milky Way and to understand the Galaxy as a complex dynamically evolving ecosystem.

Two ECOGAL postdoctoral positions are currently being opened in France, in CEA-Saclay and in IPAG-Grenoble

### Full description

The ERC synergy project “ECOGAL: Understanding our Galactic ecosystem - From the disk of the Milky Way to the formation sites of stars and planets” aims at building a unifying predictive model of star and planet formation in the Milky Way and to understand the Galaxy as a complex dynamically evolving ecosystem.

Several large research groups are now hiring across Europe (project led jointly by CEA Saclay, Heidelberg University, INAF Rome, and ESO Garching).

Two ECOGAL postdoctoral positions are currently being opened in France, in CEA-Saclay and in IPAG-Grenoble:

[I] The teams at CEA-Saclay and ESO Garching are seeking candidates to participate to the scientific exploitation of interferometric polarization datasets. A significant fraction of the work during the first year will be dedicated to the testing and validation of polarization observations carried out with the IRAM/NOEMA observatory, a new capability which development is supported by the ECOGAL consortium. This program will produce a rich dataset probing the millimeter polarized dust emission in a sample of protostars: the postdoctoral research fellow will be leading the scientific analysis with the aim to characterize the magnetic field properties in young star-forming cores (with comparison to synthetic observations of MHD models produced in the consortium). Long-term visits to ESO-Garching and IRAM/Grenoble will be needed, as well as shorter visits to Rome/Heidelberg.

The Astrophysics department of CEA is a major astrophysics laboratory located on the campus of the Paris-Saclay University, about 20 km south-west of Paris. The appointment will be for a period of two to three years, depending on the evolution of the project and data collection timelines. The position includes comprehensive benefits such as transportation and lunch subsidies, as well as a generous travel allowance.

As data is expected to start being collected in the coming months, the successful candidate is expected to start activities in the Winter 2020/Spring 2021 timeframe.

[II] The team at IPAG is seeking candidates to fill one postdoctoral research position in star formation. The postdoctoral researcher will focus on characterizing protoclusters, especially their mass, kinematic, and spatial distributions. The successful candidate is expected to analyze ALMA data towards protoclusters, and numerical simulations of cluster formation, by applying/improving existing structural analysis and clustering techniques.

She/He will work in close collaboration with the ALMA-IMF consortium members with frequent visits at the other ECOGAL sites. Previous experience in investigating cloud structure and kinematics, or applying and developing data-mining tools in general is desired. As the ALMA data is ready for scientific analysis, the successful candidate is expected to start activities in the early Fall 2020. The appointment will be for a period of two years, with a travel allowance.

Applicants for the research fellow positions should have a PhD in astronomy, astrophysics, or a closely related field.

Previous experiences in analysis of datasets from star-forming structures, and expertise in submillimetre/radio interferometric observations, especially in interferometric polarization techniques for the CEA position, will be considered as assets. We also encourage female/under-represented community applications. Applications will be handled according to CNRS and CEA rules and procedures. Applicants for the CEA position should send a CV, list of publications, brief statement of research interests and relevant expertise for the job to Dr. Anaëlle Maury (anaelle.maury@cea.fr). For the IPAG position the application should be submitted via the CNRS portal (here: CNRS application page) and 2 letters of recommendation sent directly to Dr Frédérique Motte (frederique.motte@univ-grenoble-alpes.fr). For any additional enquiries, interested applicants are encouraged to contact Dr Maury directly.

Applications received before July 31st, 2020 will receive full consideration for the IPAG-Grenoble position. The CEA-Saclay position will remain open until a suitably qualified candidate is found.

### Keywords

---

Astrophysics

**Skills**

**Softwares**