



Fellow postdoc position in observational studies on exoplanets formation

We would like to advertise an **18-months Fellow postdoc position in observational studies on exoplanets formation** at the centre de Recherche Astrophysique de Lyon (CRAL), France

The ANR-funded project DDISK (Circumstellar disks: Morphological study and mineralogical properties thanks to advances in data science) is recruiting a post-doctoral fellow to work on the analysis of near infrared and optical high contrast observations of Circumstellar disks aiming at detecting new exoplanets. The recruited researcher will join the group led by Maud Langlois at CRAL and will work with our ANR team including Olivier Flasseur, Antoine Kasczyc, L. Denneulin and Ferréol Soulez in collaboration with IPAG (Grenoble) and LIRA (Meudon).

This recruitment is funded by the ANR DDISK, which aims to optimally exploit data from the SPHERE instrument to detect exoplanets and circumstellar disks that can provide insight into planet formation processes. The Research Fellow will lead the analysis of VLT/SPHERE data with state-of-the-art high contrast algorithms. She/he will carry a systematic search of signpost or direct detection of exoplanets using multi-modality (imaging, spectroscopy and polarimetry) and multiple epochs data allowing to characterize new detections, and collaborate with partner institutions on simulations of formation mechanisms (companion/disk interaction,...) and scientific interpretation. Our team has already developed and validated several cutting-edge algorithms (PACO, REXPACO, PACOME and Rhapsodie) together with a framework to automatically optimize the data processing with these algorithms to perform such systematic circumstellar disk survey.

The position is located at the Lyon Astrophysical Research Center in the AIRI team, which is working on this project in collaboration with many French laboratories (LIRA, IPAG, OCA, ENS Lyon, EPITA,). Our team is also involved in the PEPR ORIGINS program, which funds several doctoral and postdoctoral students related to this research topic. A PhD in astronomy or related field is required. Previous experience in observational astronomy in planet formation and/or exoplanet direct detection would be appreciated. Experience in numerical simulations of circumstellar environments and/or familiarity with high-contrast imaging would be a plus.

The position is for 18 months, with a possible extension pending successful collaboration within the research group. Remuneration depends on experience and includes full benefits. The starting date is as soon as possible after the 1st June 2025 and no later than the 1st September 2025. To apply send a short research statement summarizing candidate's research interests, skills and experiences along with how this position fits into career goals, a CV including a list of publications. **The candidate will also arrange 2 recommendation letters to be sent to maud.langlois@cns.fr before May 15th 2025.** We consider diversity as an asset within our team, and welcome applicants with diverse backgrounds and experiences.

<https://anr.fr/Projet-ANR-21-CE31-0015>