

## Postdoctoral Position in Multimessenger Astrophysics at the Institut d'Astrophysique de Paris (IAP)

We announce a postdoctoral position at the Institut d'Astrophysique de Paris focusing on electromagnetic counterparts of gravitational-wave sources, with a special interest for kilonovae. This position is part of a project supported by the Île-de-France region and brings together three laboratories: the Institut d'Astrophysique de Paris (IAP, Frédéric Daigne, Robert Mochkovitch and Emmanuel Bertin); the Irène Joliot-Curie laboratory (IJCLab, Patrice Hello) and the Astroparticle and Cosmology laboratory (APC, Alexis Coleiro). Our groups are involved in observational and source modeling research activities related to the multiwavelength and multimessenger study of extreme transients—in particular compact binary mergers. IAP, IJCLAB and APC are members of the GRANDMA telescope network, the SVOM space mission, and the Virgo gravitational interferometer.

This postdoctoral position will deal with several aspects of multimessenger astrophysics: (1) developing observation and data analysis tools to identify kilonovae and GRB afterglows in data from next-generation optical telescope networks; (2) leading studies on kilonova/GRB modeling, with possible connections to GW data analysis; (3) contributing to leveraging upcoming multimessenger events for further topics such as post-merger physics, the question of the origin of r-process elements, gravitational-wave cosmology, etc.

### Application:

The candidate is expected to have experience in at least one of the aforementioned areas. Candidates with an experience in observational data analysis, or machine learning are especially encouraged to apply.

We welcome applications from all qualified candidates, but applications are particularly encouraged from traditionally under-represented groups in physics.

The position is funded for 2 years with net salary between 2227€ and 3167€, depending on the experience. Review of applications will start by 19 April 2021. The start date is flexible and could be as early as June 2021, but should not be later than October 2021.

Interested candidates are encouraged to contact Frédéric Daigne ([daigne@iap.fr](mailto:daigne@iap.fr)), Patrice Hello ([hello@lal.in2p3.fr](mailto:hello@lal.in2p3.fr)) or Alexis Coleiro ([coeiro@apc.in2p3.fr](mailto:coeiro@apc.in2p3.fr)) for further information.

### Requirements:

A PhD in (astro)physics is required by the time the appointment starts. Full working proficiency in either English or French is required.

Applications should be submitted by 16 April 2021, including:

- a cover letter
- a curriculum vitae including a list of publications
- a statement of research interests (4 pages maximum)
- two reference letters, to be sent directly by their authors to Prof. Frédéric Daigne ([daigne@iap.fr](mailto:daigne@iap.fr))

The submission must be made via the CNRS website: <https://bit.ly/2O9kOYU>

### Included Benefits:

The position benefits from the French social security system (medical insurance), maternal/paternal leave, family supplement for children, participation to public transport fees, pension contributions. We also note that schools are free in France for all children above 3 years old.