



Post-doctoral fellowship

Modeling, analysis and numerical analysis of kinetic equations

Starting date : september 1st, 2026

Length : 1 year, renewable 1 year

Work context : the post-doctoral position fits within the framework of the ANR projects [Cookie](#) (2026-2031). This project proposes new mathematical developments in the theory of kinetic equations, and in parallel, the exploration of new questions in application in plasma physics and rarefied gas dynamics, *via* the developed theoretical concepts.

Location : the hired candidate will be based at the Institut de Mathématiques de Toulouse, Université de Toulouse. We thus offer to the selected candidate the opportunity to enrich his/her training through contacts with the research teams on Partial Differential Equations, working on a common mathematical research program.

Mission : it is expected that the hired candidate shall work on a given problem, based on his/her own scientific interests and established in agreement with the principal investigators of the projects. The chosen project shall be related to the questions investigated by the Toulouse team : numerical analysis, modeling, analysis of PDEs.

Throughout the post-doctoral period, frequent visits between the various members of the ANR projects will be encouraged. Dedicated fundings will be allocated to these visits.

Expected profile : holder of a PhD thesis at the starting date of the contract, with a strong background in the analysis of PDEs or in kinetic theory, with significant contributions in the domain during the PhD or an eventual first post-doctorate.

Income : between 2810 and 3756 euros gross salary depending on experience per month for the first year.

Application : submit *exclusively* at the following email address

`francis.filbet@math.univ-toulouse.fr`

a *unique PDF file* including

- a letter of motivation describing the scientific interests of the candidate and his/her professional project, (maximum 1 page),
- a CV (academic background, PhD, eventual post-doctoral experiences, list of publications, names and coordinates of two contacts that can provide a letter of recommendation). Do not include the PhD manuscript, or any (pre)-publications, only provide an external link where the documents can be downloaded (HAL, Arxiv, theses.fr, personal webpage),
- (optional) reports of the PhD,
- a summary of the key results obtained so far (maximum 2 pages).

The selection process will start in April, 1st 2026.

Contacts :

Francis FILBET (francis.filbet@math.univ-toulouse.fr)