







Contact: Filippo Santambrogio Institut Camille Jordan Université Claude Bernard - Lyon 1 43 boulevard du 11 novembre 1918 69622 Villeurbanne cedex, FRANCE +33 (0)4 72 43 19 06 santambrogio@math.univ-lyon1.fr

ERC EYAWKAJKOS – Call for post-doc applications

The project Everything You Always Wanted to Know About the JKO Scheme (EYAWKAJKOS) has been awarded an Advanced ERC Grant by the European Commission. This funding will allow to hire several post-doc researchers and in particular applications are open for a three-years position for 2024/27. The selected post-doc will join the Institut Camille Jordan, in the research group *Modélisation Mathématique et Calcul Scientifique*, and be based in the Lyon 1 campus in La Doua. Applications by recent PhDs are welcome and should be sent to the PI at the email address santambrogio@math.univ-lyon1.fr by January 28th, 2024. The selection will be done during February, could include interviews for shortlisted candidates, and will come out with a ranking. The first ranked applicant will be contacted with a post-doc offer soon after.

- **Research topics:** EYAWKAJKOS is focused on the JKO scheme for Wasserstein gradient flows. It includes the study of existence, regularity and asymptotic behavior for the corresponding PDEs, uniform estimates or convergence results on the solutions of the JKO scheme, and numerical approximations exploiting the JKO scheme for both well-known equations (Fokker-Planck, porous medium,...) and less classical ones (from population dynamics, data analysis...). Details on the full research program of the project can be found here and more general information on EYAWKAJKOS here.
- **Duration:** the post-doctoral contract can be established for a duration of up to 36 months. The standard starting date is September 1st, 2024. Candidates preferring to negociate a different date and/or a shorter duration are encouraged to explain this in their application. The post-doc offer will include the duration which is proposed to the candidate.
- Eligibility: holding a PhD at the starting date of the contract, obtained no more than 5 years before.
- Salary: salary will be adjusted to the experience and to the selected researcher. For recent PhDs, the gross monthly salary will be of approximately 3200 euros.¹
- **Teaching duties:** the position comes with no teaching load. The maths department in Lyon 1 is always in need of teachers for undergraduate exercice classes, and postdocs can apply for teaching assignments. Such a teaching is paid extra and is fully optional. Classes are usually given in French.
- **Research funds:** the successful applicant will be entitled to use research funds from this same project for visits, invitations, and research-related expenses. The standard endowent is 3000 euros/year but can be negotiated if needed. A laptop can also be bought with research funds and provided.
- Application: please send by email a CV, a list of publications, a research statement, and a cover letter. The cover letter should contains the proposed dates for the doctoral contract, and the contact details of two scholars who could be contacted for reference purposes, if needed.

¹A Gross salary of 3200 euros/month should give a "net" salary of 2500 euros approx, where net means the standard net notion in France : after social contributions, before income tax. The income tax, whose amount strongly depends on the family situation of the employee and ranges from 0% to 8% approx on salaries of this order of magnitude, is directly deducted from the salary, and is then adjusted after the tax declaration which is done in May of the year n + 1 for the income of the year n.