

Call for a two years post-doctoral position

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In the context of the PSL Starting Grant project “Optimal control of ecological system”, we will hire one post-doctoral researcher for a two-years position. The post-doctoral researcher will be joining the non-linear analysis team of CEREMADE (Paris Dauphine Université, PSL). Applications by recent or soon to be PhDs are welcome; they should be sent at the address mazari@ceremade.dauphine.fr by the 4th of September 2023. Informal talks can also be arranged before the deadline.

Research topics

The project will address problems stemming from the control and optimisation of ecological system; the precise themes are as follows:

- (1) Systems of reaction-diffusion,
- (2) Shape optimisation and optimal control,
- (3) Quantitative estimates and their applications in optimal control theory,
- (4) Numerical simulations of optimal control problems,
- (5) The qualitative analysis of Mean Field Games systems.

Applicants familiar with one or several of these topics will be appreciated; applicants with a background in nonlinear PDEs or in other branches of calculus of variations will also be considered provided they are committed to get involved in these fields.

Eligibility and starting date

The post-doctoral contract is set to start within the period October 2023-March 2024; the successful applicant should hold their PhD diploma at the start of the contract.

Salary

The gross salary is planned to be between 3100 and 3300 euros/month (depending on the profile).

Funding

The recruited post-doctoral researcher will be entitled to use 5Keuros for visits or research related expenses over the course of their contract.

Application file

The application should consist of:

- (1) A detailed CV containing the complete list of publications.
- (2) A two to three pages summary of past research activities.
- (3) A cover letter mentioning the proposed starting date.
- (4) A list of two academics that could be contacted for recommendation letters.