

Postdoctoral position - 2018-2019

Shape optimization problems arising in biomathematics

Application considered until december 1st 2017

The group “Analysis and simulation of optimal shapes - application to lifesciences” invites applications for a postdoctoral research position in Mathematics within the scope of the project. The postdoctoral researcher will work at Laboratoire Jacques-Louis Lions¹ in Paris.

This research project-team (<https://www.ljll.math.upmc.fr/~privat/emergenceASF0.php>) gathers researchers from the *Fondation des Sciences Mathématiques de Paris* (FSMP), and is composed of applied mathematicians that are specialized in biomathematics and shape optimization.

The scope of the project combines modeling, mathematical analysis and life sciences. Its aim is to bring together skills and to create a top team for analyzing biomathematical and shape optimization problems. We aspire to investigate several applied shape optimization problems involving either fluid mechanics, reaction-diffusion or geometrical models.

The position is for one year with possibility of extension upon mutual agreement. The starting date will be dependent upon agreement with the FSMP, but should be no later than the end of 2018.

The salary is about 30000 € (for 12 months, tax free), and there are no teaching duties associated with the position.

Applicants should have a Ph.D. in Mathematics (or equivalent). They must show very strong research promise in (at least) one of the relevant topics for the project:

- *calculus of variations/shape optimization;*
- *mathematical analysis of biological/population dynamics systems;*
- *numerical analysis of optimization problems;*
- *control theory;*
- *spectral theory/principal eigenvalues.*

Full details for applying are on the FSMP website

<https://www.sciencesmaths-paris.fr/fr/postdocs-45.htm>.

The selection of candidates will be based upon scientific merit and interests alone.

Additional information about the group and the position may be found at the website of the project:

<https://www.ljll.math.upmc.fr/~privat/emergenceASF0.php>.

For any further information please email Dr. Yannick Privat (yannick.privat@upmc.fr).

¹LJLL, <http://www.ljll.math.upmc.fr>.

References

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