# Postdoctoral Position in the ANR MAGA

Location : **Orsay, France**
Discipline : **Applied Mathematics**
Supervisors : **Q. Mérigot, F. Santambrogio**
Duration : **1 year, 2017/18**
Deadline for applying : **June 30th, 2017**

MAGA (Monge-Ampère and Computational Geometry) is a research project funded by the French ANR (Agence Nationale de la Recherche) for 2016-2020. It involves researchers from several institutions, including a group at *Laboratoire de Mathématiques d'Orsay* in *Université Paris-Sud*. The main topics of this project are discrete and computational aspects of optimal transport, and applications of optimal transport to economics, engineering and natural sciences. More information on this research project can be found browsing its webpage.

The Orsay group of MAGA project seeks a post-doctoral researcher , to be hired for one academic year, 2017/18. The selected post-doc will work under the supervision of Quentin Mérigot and Filippo Santambrogio, but collaborations with other member of the MAGA project will be encouraged. She/he will be employed by Université Paris-Sud, under a fixed-term contract of one year, and the salary is of the order of 2000 euros per month, net of social taxes. No teaching duty is associated to this position. Professional travel expenses will be covered by the MAGA project. The starting date would ideally be October 1st 2017, but can be postponed up to March 1st 2018.

Applications are welcome by any scientist with experience in the above-mentioned fields, holding a Doctoral degree, or expecting to get it by the starting date of the contract. In order to apply, candidates must send their complete CV, the list of their publications with links to retrieve them on the web, and a short research project to both `quentin.merigot@math.u-psud.fr` and `filippo.santambrogio@math.u-psud.fr`. Applications must be received **by June 30, 2017**. The research project must be related to the activities of MAGA, and in particular to the research interests of the group based at Orsay, i.e.

- computational aspects of optimal transport, Monge-Ampère equations and prescribed Jacobian problems (including interest in large-scale computations) ;
- discretization of PDEs and variational problems involving Laguerre/power diagrams ;
- theoretical study of discrete optimal transport problems ;
- applications of optimal transport to social and natural sciences (non-exhaustive list : fluid dynamics, PDEs with density constraints, geometric optics, density functional theory, principal-agent problems, optimal quantization).

The applicants are welcome to contact Q. Mérigot and/or F. Santambrogio in order to prepare their research project.