

Gaspard Jankowiak

## Research

My main interests in research are partial differential equations modelling problems with applications in life sciences and physics, both from theoretical and numerical points of view. I have worked on a model for boson stars with temperature, and I am currently investigating stationary states in a parabolic-parabolic crowd motion model.

## Education

- 2010–now **PhD**, *Ceremade*, Paris.  
*PDEs with attractive mean field nonlinearities*  
Supervisor: Pr. J. Dolbeault
- 2010 **Master's thesis**, *Imperial College*, London.  
*Large coherent structure in shear layer flows*  
Supervisor: Pr. X. Wu
- 2009–2010 **Erasmus exchange**, *Imperial College*, London.  
Dynamical systems, ergodic theory, bifurcation theory, hydrodynamic stability, asymptotic analysis
- Early 2009 **Research project**, *LJK/INRIA*, Grenoble.  
Supervisor: Jakob Verbeek *Image quantization and classification through the use of random decision trees*
- 2007–2009 **Master's degree**, *Ensimag*, Grenoble.  
Various courses in computer science and applied mathematics, both theoretical and numerical.  
PDEs, Numerical methods

## Publications

- In prep. *Crowd motion and herding models: multiplicity and dynamical stability of the stationary solutions*, J. Dolbeault, G.J., P. Markowich

## Conferences

- 2012 **Biomat 2012**, *Facultad de Ciencias*, Grenada, Spain, attended.
- 2012 **Applied PDEs for Life Sciences**, *UAC*, Barcelona, Spain, poster.
- 2010 **Workshop on quantum fluids**, *Newtons Institute*, Cambridge, UK, attended.
- 2010-12 **Several seminars and PhD students workshops**, Paris, attended.

## Teaching

- 2010-2013 **Tutorial assistant**, *Université Paris Dauphine*.  
Linear algebra and numerical optimisation, 2nd and 3rd year.