Research

My main interests in reseach 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

Conferences

- 2012 Biomat 2012, Faculdad de Ciencias, Grenada, Spain, attended.
- 2012 **Applieds PDE's for Life Sciences**, *UAC*, Barcelona, Spain, poster.
- 2010 Workshop on quantum fluids, Newton's 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.