Gaspard Jankowiak

PhD student

Ceremade - Université Paris Dauphine
75116 Paris Cedex
France
📞 *+33 (0) 6 65 08 54 96*
✉ *jankowiak@ceremade.dauphine.fr*
🖥 *gaspard.janko.fr*

Research interests

Non linear diffusion equations (fast diffusion equation), long time behaviour of parabolic systems and equations (Keller-Segel model for chimiotaxis), functional inequalities

Education

2010–2014 **PhD - Applied mathematics**, *Ceremade - Université Paris Dauphine*, Paris.
Asymptotic study of non linear diffusion type PDEs and associated functional inequalities - defense scheduled on June 23th, 2014
Supervisor : Jean Dolbeault

2010 **Master's thesis**, *Imperial College*, London.
Large coherent structures in shear layer flows
Supervisor : X. Wu

2009-2010 **Erasmus exchange**, *Imperial College*, London.
Dynamical systems, ergodic theory, bifurcation theory, hydrodynamic stability, asymptotic analysis

Summer 2009 **Research projet**, *LJK*, Grenoble.
Numerical study of a electrical impedance tomograhy model with acoustic perturbations
Supervisor : Éric Bonnetier

2007-2010 **Master's degree**, *Ensimag*, Grenoble.
Multiple courses in computer science and applied mathematics. PDEs, optimisation, numerical methods

Publications and preprints

[5] J. Dolbeault, M.J. Esteban et G. Jankowiak, *Rigidity results for semilinear elliptic equation with exponential nonlinearities and Moser-Trudinger-Onofri inequalities on two-dimensional Riemannian manifolds*, arXiv:1404.7338

[4] G. Jankowiak et V.H. Nguyen, *Fractional Sobolev and Hardy-Littlewood-Sobolev inequalities*, arXiv:1404.1028

[3] J. Dolbeault, Maria J. Esteban et Gaspard Jankowiak, *The Moser-Trudinger-Onofri inequality*, arXiv:1403.5042

[2] J. Dolbeault, G. Jankowiak, *Sobolev and Hardy-Littlewood-Sobolev inequalities*, arXiv:1312.2568, *Journal of Differential Equations*, 10.1016/j.jde.2014.04.021

[1] J. Dolbeault, G. Jankowiak et P.A. Markowich, *Stationary solutions of Keller-Segel type crowd motion and herding models: multiplicity and dynamical stability*, arXiv:1305.1715, to appear in *Mathematics and Mechanics of Complex Systems*

Talks and visits

Juil. 2014 « Entropy Methods, PDEs, Functional Inequalities, and Applications » week, Banff, *Sobolev and Hardy-Littlewood-Sobolev inequalities*

Jan. 2014 PhD students work group, Ceremade, *Inégalités de Sobolev et Hardy-Littlewood-Sobolev*

Juil. 2013 Guest visitor at DIM - Universidad de Chile, Santiago

Mai 2013 SMAI congress, Seignosse, *Solutions stationnaires pour deux modèles de mouvement de foule : multiplicité et stabilité dynamique*

Sep. 2012 Applied PDEs in Life Sciences, Barcelona, poster

Teaching

2013-2014 **ATER**, *Université Paris Dauphine*, Paris.

2010-2013 **Tutorials**, *Université Paris Dauphine*, Paris.
over 250 hours in 2nd and 3rd year. Linear algebra, differential calculus, optimisation

Languages

French Mother tongue
English Fluent
Spanish Intermediate