

# Antoine Diez

## Imperial College London

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Born on May 14th, 1994 in Paris

### Curriculum Vitae

- 2018–... **PhD student**, *Imperial College London*.  
Under the supervision of Pierre Degond (Imperial College London), Sara Merino-Aceituno (University of Vienna) and Amic Frouvelle (Université Paris Dauphine)
- 2017–2018 **Master 2 of Mathematics**, *É.N.S Lyon*.  
First class honours
- 2016–2017 **“Agrégation de mathématiques”**, *É.N.S. Rennes/Université de Rennes 1*.  
(National) rank 10/305
- 2015–2016 **Master 1 of Mathematics**, *É.N.S. Rennes/Université de Rennes 1*.  
◦ First class honours (rank 3/56)  
◦ Two months internship at the University of Cambridge (UK) supervised by Prof. Clément Mouhot.  
Title : *Around the Boltzmann-Grad limit*
- 2014–2016 **Licence of Physics (Bachelor’s degree)**, *É.N.S. Rennes/Université de Rennes 1*.  
First class honours
- 2014–2015 **Licence of Mathematics (Bachelor’s degree)**, *É.N.S. Rennes/Université de Rennes 1*.  
◦ First class honours (rank 2/108)  
◦ Internship at the University Paris-VI supervised by Dr. Corentin Audiard.  
Title : *Asymptotic Solutions of the Quadratic Nonlinear Schrödinger Equation*
- 2012–2014 **French "classes préparatoires" (MPSI and MP\*)**, *Lycée Louis-le-Grand, Paris*.  
Recruited (French "normalien") at the École Normale Supérieure de Rennes

### Publications

G. Clarté, A. Diez, and J. Feydy. Collective proposal distributions for nonlinear MCMC samplers: Mean-field theory and fast implementation. *arXiv preprint arXiv: arXiv:1909.08988*, 2020.

P. Degond, A. Diez, A. Frouvelle, and S. Merino-Aceituno. Phase transitions and macroscopic limits in a BGK model of body-attitude coordination. *J. Nonlinear Sci.*, 2020.

A. Diez. Propagation of chaos and moderate interaction for a piecewise deterministic system of geometrically enriched particles. *Electron. J. Probab.*, 2020.