Ruben Zakine

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Academic path

2016–now **PhD in Statistical Physics and Soft Matter**, *Laboratoire Matière et Systèmes Complexes*, Paris.

2015–2016 **Master 2 ICFP, Quantum Mechanics and Statistical physics**, *École Normale Supérieure*, Paris.

2014–2015 **Master 1 High Energy Physics**, *École polytechnique*, Palaiseau.

2012–2015 **Engineer formation**, *École polytechnique*, Palaiseau.

2009–2012 **Classe Préparatoire aux Grandes Écoles, Physics and Chemistry**, *Lycée Louis Le Grand*, Paris.

June 2009 **Scientific Baccalauréat**, *Lycée Louis Le Grand*, Paris.
Baccalauréat scientifique mention Très Bien

Experience

Teaching

since September 2016 **Teaching assistant in physics for first year medical students (PACES)**, *Université Paris Descartes*, Paris, France.

Internships

January 2016–May 2016 **M2 research internship : Field mediated interactions between active spins**, *Laboratoire Matière et Systèmes complexes*, Paris, France.

March 2015–July 2015 **M1 research internship : Synchrotron emission in relativistic shocks associated to gamma ray bursts**, *Institut d'Astrophysique de Paris*, Paris, France.
Advisor : Martin Lemoine.

November 2012–April 2013 **Research and development in fire engineering**, *Laboratoire Central de la Préfecture de Police*, Paris.

Language and computer skills

Language French (mother language), English (fluent/professional use), Spanish (basics), German (basics)

Edition Word, LaTeX, Excel, PowerPoint

Programming Java, Python, C

Numerical simulations SciLab, Python, C, FreeFem++

Publications and preprints

R. Zakine and M. Lemoine. The elusive synchrotron precursor of collisionless shocks. *Astronomy and Astrophysics*, 601:A64, May 2017.

Ruben Zakine, Jean-Baptiste Fournier, and Frédéric van Wijland. Field-embedded particles driven by active flips. *Phys. Rev. Lett.*, 121:028001, Jul 2018.

Ruben Zakine, Alexandre Solon, Todd Gingrich, and Frédéric van Wijland. Stochastic stirling engine operating in contact with active baths. *Entropy*, 19(5):193, 2017.

Seminar Field-Embedded Particles driven by active flips, Tokyo Metropolitan University, January 2018