

Mathias CASIULIS

PhD Student at LPTMC, Université Pierre and Marie Curie, Paris ESPCI Engineer (Class of 2015) casiulis@lptmc.jussieu.fr

Research

Oct 2016 - 2019 PhD in Physics in the Statistical Physics team at LPTMC, Université Pierre and Marie Curie - UPMC (Paris).

Collective motion of a polar Hamiltonian liquid.

Advisors: Dr. Marco Tarzia, Pr. Leticia Cugliandolo and Dr. Olivier Dauchot

Jan 2016 Research Internship (4 months) in the EC2M team, Gulliver lab, ESPCI Paris

Analytical and numerical study of a Hamiltonian liquid of spins.

Supervisor: Dr. Olivier Dauchot

May 2015 Research Internship (3 months) in the MeTheo team, LOP lab, Institut Langevin, ESPCI Paris

Analytical and numerical optimization of light absorption in a strongly scattering medium.

Supervisors: Dr. Romain Pierrat, Pr. Rémi Carminati

Jul 2014 Corporate Internship (6 months) in the Cold Atoms team, LMNP lab, Thales Research and Technology (Palaiseau lab)

On-chip matter-wave interferometry for gravimetry

Supervisor: Dr. Sylvain Schwartz

Publication: M. Dupont-Nivet, M. Casiulis, T. Laudat, C. Westbrook, S. Schwartz, Phys. Rev. A 91, 053420 (2015)

Jul 2013 Research Internship (6 weeks) in the SPECS team, INSP lab, UPMC

STM Observation of Type II Superconductors

Supervisor: Pr. Dimitri Roditchev

Teaching and Outreach

2017 - Teaching assistant at UPMC. Exercise classes and practical work for 1st year students - Newtonian Dynamics.

2017 - Co-writer and teacher of the Physics for All lectures at ENS Paris.

2014 - Vice-president, co-creator, producer, and host for The Lutetium Project (<u>www.youtube.com/TheLutetiumProject</u>)

2012 - 2014 Teaching assistant for prep classes students at Lycée Louis-le-Grand. Oral examinations in Physics.

Education

2015 - 2016 Master 2 ICFP-ENS, Quantum Physics Program - magna cum laude, average score: 76.4% - Ecole Normale Supérieure

2012 - 2015 ESPCI Paris (Grande Ecole d'Ingénieurs, https://www.espci.fr/en/) - Physics class Valedictorian

2010 - 2012 Preparatory classes for Grandes Écoles – Physics Section - Lycée Louis-le-Grand (Paris)

2010 Baccalaureate (Science major) – summa cum laude, average score: 90.9%

Languages

French Mother tongue

English Fluent - 8.5/9 IELTS score in 2014.

Spanish Intermediate level Lithuanian Intermediate level

Code C, Fortran, Matlab, Mathematica