Jingrui Niu

Curriculum Vitae

Laboratoire Jacques-Louis Lions
Sorbonne Université
Tour 15-16, Office 305
75005 Paris Cedex 05, France
✉ *niu@ljll.math.upmc.fr*

Education

2021 – Now **Post-doc.**
LJLL, Sorbonne Université. Supervisor : *Oana Ivanovici*

2017 – 2021 **PhD in Fundamental Mathematics.**
LMO, Université Paris-Saclay. Supervisors : *Nicolas Burq* & *Pierre Lissy*
-*Dissertation* : The Controllability of the Coupled Wave Systems

2016 – 2017 **M2 in Analysis, Modelization, Simulation**
Université Paris-Saclay, Supervisor : *Nicolas Burq*
– *Mémoire :* On the proof of the Strichartz estimates on the compact manifold

2014 – 2016 **Master student**
Academy of Mathematics and Systems Science, Chinese Academy of Sciences, Beijing. Supervisor : *Ping Zhang*

2010 – 2014 **Bachelor of Science in Pure and Applied Mathematics**
Nankai University, Tianjin.
-Enrolled in Nankai Bo-Ling Mathematics Class-2010

Research Interests

I am interested in various domains of partial differential equations, including control and stabilization on dispersive equations, microlocal and semi-classical defect measures and unique continuation properties.

Current Research Topics

I mainly focus on the control problem of the coupled wave systems and the wellposedness of the wave equation with the certain boundary. Now I am a member of the project ERC ANADEL, under direction of Oana Ivanovici.

- J. Niu. Simultaneous Control of Wave Systems. *SIAM J. Control Optim.*, 59(3) :2381–2409, 2021

- P. Lissy and J. Niu. Controllability of a coupled wave system with a single control and different speeds. preprint, 2022

Academic Activities

1. Summer school “Microlocal Methods in Global Analysis", Göttingen, 27-30 August 2018.
2. Conference “Workshops on nonlinear fluids and PDEs", Nanjing, 06-09, August 2019.
3. Invited talk, “Microlocal methods on the controllability of wave equations", Fudan University, Shanghai, 20 August 2019.
4. Conference “Control and dynamics of PDE", Strasbourg, 28-31 October 2019.
5. Workshop “Nonlinear Waves and Hamiltonian PDEs”, La Thuile, February 20-26, 2022.