

## Felice Iandoli

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CONTACT INFORMATION	Laboratoire Jacques Louis Lions 4 Place Jussieu, 75005 Paris, France	+33 752506938 iandoli@ljl.math.upmc.fr
RESEARCH INTERESTS	Microlocal Analysis, Dispersive Estimates, Wave and Schrödinger Equations, Dynamical Systems, Nonlinear Dispersive PDEs, Normal Forms	
CAREER AND EDUCATION	<b>Laboratoire J.L. Lions, Sorbonne Université</b> Post-doctoral researcher funded by ERC ANADEL, <i>starting from October 1-st, 2019.</i>  <b>Laboratoire J.A. Dieudonné, Université de Nice</b> Post-doctoral researcher funded by ERC ANADEL, <i>November 1-st, 2018-30 September, 2019.</i>  <b>SISSA</b> Ph.D. in Mathematical analysis, models and applications. The thesis has been defended on 26/09/2018, the examination has been passed <i>cum laude</i> . <ul style="list-style-type: none"><li>• Title of the thesis: Local and almost global solutions for fully-nonlinear Schrödinger equations on the circle</li><li>• Advisors: Prof. Massimiliano Berti and Dr. Roberto Feola</li></ul> <b>University of Pisa</b> Master degree in mathematics, grade: 110/110 <i>cum laude</i> <ul style="list-style-type: none"><li>• Title of dissertation: Teoria di scattering per NLS (eng: Scattering theory for NLS)</li><li>• Advisor: Prof. Nicola Visciglia</li></ul>	
PUBLICATIONS	<ol style="list-style-type: none"><li>1) F. IANDOLI, R. Scandone, <i>Dispersive estimates for Schrödinger operators with point interactions in <math>\mathbb{R}^3</math></i>, <b>Advances in Quantum Mechanics: Contemporary Trends and Open Problems</b>, A. Michelangeli and G. Dell'Antonio, eds., Springer INdAM Series, vol. 18, Springer International Publishing, (2017).</li><li>2) R. Feola, F. IANDOLI, <i>Local well-posedness for quasi-linear NLS with large Cauchy data on the circle</i>, <b>Annales de l'Institut Henri Poincaré (C) Non Linear Analysis</b>, (1) Vol 36: 119-164, (2019).</li><li>3) R. Feola, F. IANDOLI, <i>Long time existence for fully nonlinear NLS with small Cauchy data on the circle</i>, <b>Ann. Sc Norm. Pisa Cl. Sci.</b> (5), Vol XXII, 109-182, (2021).</li><li>4) J., Bernier, R. Feola, B. Grébert, F. IANDOLI, <i>Long-time existence for semi-linear beam equations on irrational tori</i>, <b>J. Dyn. Diff. Equat.</b> (3), Vol 33, 1363-1398, (2021).</li><li>5) R. Feola, F. IANDOLI, <i>A non-linear Egorov theorem and Poincaré-Birkhoff normal forms for quasi-linear pdes on the circle</i>, preprint: <a href="https://arxiv.org/abs/2002.12448">arxiv.org/abs/2002.12448</a>, (2020).</li><li>6) R. Feola, F. IANDOLI, <i>Local well-posedness for the quasi-linear Hamiltonian Schrödinger equation on tori</i>, preprint: <a href="https://arxiv.org/abs/2003.04815">arxiv.org/abs/2003.04815</a>, (2020). (<b>Accepted on Journal de Mathématiques pures et appliquées</b>)</li><li>7) R. Feola, B. Grébert, F. IANDOLI, <i>Long time solutions for quasi-linear Hamiltonian perturbations of Schrödinger and Klein-Gordon equations on tori</i>, (<b>Accepted on Analysis and PDES</b>), preprint: <a href="https://arxiv.org/abs/2009.07553">arxiv.org/abs/2009.07553</a>, (2020).</li></ol>	

8) R. Feola, F. IANDOLI, F. Murgante, *Long-time stability of the quantum hydrodynamical system on irrational tori*, **Math. in Engineering**, (3), Vol 4, 1-24, (2022).

# INVITED CONFERENCES

Invited speaker at:

- *Dynamics of nonlinear dispersive PDE's*, February 2018, La Thuile, Italy, Invited by Prof. Nicola Visciglia.
- *Nonlinear Dispersive PDE's*, October 2018, Università Sapienza, Rome, Italy, Invited by Prof. Oana Ivanovici.
- *Hamiltonian PDEs and nonlinear waves*, February 2019, La Thuile, Italy, Invited by Dr. David Lafontaine.

# SEMINARS

- *Existence en temps grand pour l'équation de Klein-Gordon sur les tores*, 2021, Séminaire à l'Université de Cergy Paris.
- *Existence en temps grand pour l'équation de Klein-Gordon sur les tores*, 2022, Séminaire à l'Université de Besançon.
- *Local and almost global solutions for quasi-linear Schrödinger equations*, 2020, Séminaire Enriques-Lebesgue, Milano-Nantes, via ZOOM.
- *Long time existence for small solutions of Hamiltonian or reversible quasilinear equations on the circle*, 2020, Séminaire de l'équipe EDP, IECL, Nancy, France.
- *Long time solutions for the fully-nonlinear NLS on the circle*, 2020, Séminaire du LAGA, Paris 13, Paris, France.
- *Local and almost global solutions for fully non-linear Schrödinger equations on the circle*, 2018, Laboratoire J.A. Dieudonné, Nice, France.
- *On the quasi-linear Schrödinger equations on the circle*, 2018, Università di Pisa, Pisa, Italy.

# VISITING RESEARCHER

From October 1-st, to 31 October, 2018, Laboratoire J.A. Dieudonné, Nice, France, Invited by Prof. Oana Ivanovici.

# ATTENDED CONFERENCES

- *Normal forms and large time behavior for nonlinear PDE*, 2015, IHES, Bures-sur-Yvette, France.
- *Nonlinear Waves 2016: Summer School*, 2016, Centre Henri Lebesgue, Nantes, France.
- *Hamiltonian Dynamics, PDE's and Waves on the Amalfi coast*, 2016, Maiori, Italy.
- *Winter School "Dynamics and PDE's"*, 2017, Saint-Etienne de Tinée, France.
- *Linear and Nonlinear Wave Phenomena: Stability, Propagation of Regularity and Turbulence*, 2018, Cortona, Italy.
- *Quantum Resonances and Related Topics (conference in honor of André Martinez)*, 2019, Paris, France.
- *Dispersive Waves and Related Topics (conference in honor of Gilles Lebeau)*, 2019, Bergen, Norway.
- *New Trends in Propagation of Linear and Nonlinear Wave Phenomena*, 2019, Erice, Italy.
- *Journées équations aux dérivées partielles*, 2021, Obernai, France.
- *Qualitative properties of dispersive PDEs*, 2021, Rome, Italy.

# EXPERIENCE AS A PEER-REVIEWER

- Discrete and continuous dynamical systems
- Mathematics in Engineering

- MDPI Mathematics

TEACHING (IN  
FRENCH)

- 36h TD: *Séries et Séries de fonctions*, 2020-2021, UPMC (Sorbonne Université), L2
- 36h TD: *Équations différentielles*, 2020-2021, UPMC (Sorbonne Université), L2
- 36h TD: *Topologie et calcul différentiel*, 2021-2022, UPMC (Sorbonne Université), L2

SPOKEN LANGUAGES

- Italian: mother tongue
- English: fluent
- French: Utilisateur expérimenté