

Frédéric Valet

Currently post-doctor at the University of Bergen , Norway.

Key words of research

Dispersive equation : blow-up dynamic, multi-solitons, long-time existence, turbulence.

Cursus

- 2020–2023 : Post-doctorate at the University of Bergen, Norway
- 2019–2020 : ATER at the University of Strasbourg
- 2016–2019 : PhD student at the University of Strasbourg
- 2016 : Master of Fundamental Mathematics at the University of Strasbourg on the studies of PDEs.
- 2014 : Graduate in computer science at the University of Rennes 1.
- 2013 : Graduate in mathematics at the University of Rennes 1.

Diploma

- 2020 (july) : PhD defense entitled : "Study of long-time behaviors of Zakharov-Kuznetsov type equations".

The jury was composed of :

- ★ Raphaël Côte, Professeur, Université de Strasbourg,
 - ★ Justin Holmer, Associate Professor, Brown University,
 - ★ Luc Molinet, Professeur, Université de Tours,
 - ★ Vianney Combet, Maître de conférence, Université de Lille,
 - ★ Yannick Privat, Professeur, Université de Strasbourg,
 - ★ Jean-Claude Saut, Professeur émérite, Université Paris-Saclay,
 - ★ Birgit Schörkhuber, Junior Research Group Leader, Karlsruhe Institute of Technology.
- 2015 : Mathematical french diploma for teaching (Agrégation)
 - 2014 : Admitted at the ENS Rennes
 - 2010 : High school graduation

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Interventions

- June 2022 : **Talk in a conférence** in Bergen for the 2nd Norwegian meeting on PDEs : "Strong interaction of solitary waves for the fmKdV equation"
- March 2022 : **Poster presentation** at Journées Jeunes EDPistes at Lyon : "On the lack of complete integrability of the Zakharov-Kuznetsov equation"
- March 2022 : **Seminar** at Besançon, Université de Franche-Comté : "Multi-solitons des équations de Zakharov-Kuznetsov"
- February 2022 : **Seminar** at Dijon, Institut de Mathématiques de Bourgogne : "Multi-solitons des équations de Zakharov-Kuznetsov"
- May 2021 : **Seminar at the doctoral school MSII** of Strasbourg : "Some asymptotic behaviors of solutions of dispersive equations"
- February 2020 : **Seminar** at Bergen, Norway : "On the multi-solitons of the Zakharov-Kuznetsov equations"
- March 2019 : **poster presentation** at Journées Jeunes EDPistes at Rennes : "Étude de multisolitons de l'équation de Zakharov-Kuznetsov"
- February 2019 : **Conference for SLIME**, student association of graduate student in Mathematics and Informatics of Strasbourg : "Les EDPs, c'est dans nos cordes (vibrantes)!"
- October 2018 : **Analysis team seminar** of Strasbourg : "Construction de solutions de l'équation des Wave Maps explosant en temps fini"
- October 2017 : **Poster presentation** to the VIth colloquim EDP Normandie : "Construction of solutions of the Wave Maps equation blowing up in finite time"

Publications and preprints

Arnaud Eychenne and Frédéric Valet (October 2022), "Asymptotic behaviour of solutions to semi-linear fractional Schrödinger equations",
Preprint. Arxiv, Hal

Arnaud Eychenne and Frédéric Valet (Septembre 2022), "Strongly interacting solitary waves for the fractional modified Korteweg-de-Vries",
Preprint. Arxiv, Hal

Raphaël Côte and Frédéric Valet (Mars 2021), "Polynomial growth of high Sobolev Norms of solutions of The Zakharov-Kuznetsov Equation",
Communications on Pure and Applied Analysis, Vol 20, Issue 3. Arxiv, Hal

Frédéric Valet (Mars 2021), "Asymptotic K-soliton-like Solutions of the Zakharov-Kuznetsov type equations"
Transactions of the American Mathematical Society, n°374. Arxiv, Hal.

Marie Houillon, Salih Ouchtout and Frédéric Valet, *Semaine d'Études Mathématiques et Entreprise : Étude statique et dynamique d'un problème d'empilement*,
Hal.

Responsibilities

Reviewer for several journals, including :
Nonlinear Analysis, Nonlinearity, Nonlinear Phenomena, PDEA, ZAMP.

Part of the local organisation committee of the 2nd Norwegian meeting on PDEs.