

Program Workshop

Dynamical Systems Approaches towards Nonlinear PDEs

Lecture hall: 8.122

Meeting room: 8.526

Wednesday, 28.08.2024

9:00 - 9:20	Registration and Coffee – 8.526
9:20 - 9:30	Welcome and Opening – 8.122
9:30 - 10:15	Dmitry Pelinovsky (McMaster University) <i>Pinning phenomenon for existence and stability of wave patterns</i>
10:15 - 11:00	Michael Plum (Karlsruhe Institute of Technology) <i>Orbital stability investigation for travelling waves in a nonlinearly supported beam</i>
11:00 - 11:30	Coffee Break – 8.526
11:30 - 12:15	Arnd Scheel (University of Minnesota) <i>Complex spatio-temporal resonances as selection mechanisms</i>
12:15 – 13:30	Lunch Break
13:30 – 14:15	Wolfgang Reichel (Karlsruher Institut für Technologie) <i>Time-Periodic Waves for Maxwell Equations with Nonlinear Polarization</i>
14:15– 15:00	Tomáš Dohnal (Martin-Luther-Universität Halle-Wittenberg) <i>Wave-Packets at a Material Interface in Nonlinear Maxwell Equations</i>
15:00 - 15:30	Coffee Break – 8.526
15:30 - 16:15	Mariana Haragus (Université de Franche-Comté) <i>Modulational nonlinear and uniform subharmonic dynamics of periodic waves</i>
16:15 – 17:00	Wolf-Patrick Düll (Universität Stuttgart) <i>On the Validity of Approximation Equations for Nonlinear Dispersive Systems</i>
17:00	“Forms and Forces” - Guided Tour on Campus Vaihingen with Prof. Markus Stroppel and Dr. Marc Scheffler

Thursday, 29.08.2024

9:00 - 9:45	Alexander Mielke (Weierstraß-Institut für Angewandte Analysis und Stochastik) <i>Asymptotic self-similar behavior in reaction-diffusion systems on $\mathbb{R}^d$</i>
9:45 - 10:30	Mark Groves (Universität des Saarlandes) <i>Three-dimensional gravity-capillary solitary waves on Beltrami flows</i>
10:30 - 11:00	Coffee Break – 8.526
11:00 - 11:45	Christina Lienstromberg (Universität Stuttgart) <i>Dynamics of solutions to a rimming-flow equation</i>
11:45 - 12:30	Bastian Hilder (Technische Universität München) <i>A spatial dynamics approach to film rupture and pattern formation in thermocapillary thin films</i>
12:30 – 13:45	Photo and Lunch Break
13:45 - 14:30	Dirk Blömker (Universität Augsburg) <i>The impact of white noise on a supercritical bifurcation in the Swift-Hohenberg equation</i>
14:30– 15:15	Reika Fukuizumi (Waseda University) <i>Explicit renormalization for a singular nonlinear Schrödinger equation</i>
15:15 – 16:45	Poster Session and Coffee – 8.526
16:45	Hike to Bärensee with Biergarten

Friday, 30.08.2024

9:00 - 9:45	Hannes Uecker (Carl von Ossietzky Universität Oldenburg) <i>Numerical continuation and bifurcation for differential geometric PDEs</i>
9:45 - 10:30	Katharina Schratz (Sorbonne University) <i>Resonances as a computational tool</i>
10:30 – 11:00	Coffee Break – 8.526
11:00 – 11:45	C. Eugene Wayne (Boston University) <i>Continuum approximations for the β-FPUT model</i>
11:45 – 12:30	Jean-Pierre Eckmann (Université de Genève) <i>A mysterious blowup in cosmological effective field theories</i>
12:30	Closing