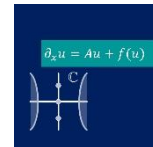


# Program Workshop

## Spatial Dynamics and related approaches



Lecture hall: 8.122  
Meeting room: 8.526

### Monday, 05.09.2022

9:00 - 9:20	Registration and Coffee – 8.526
9:20 - 9:30	Welcome and Opening – 8.122
9:30 - 10:00	Overview Talk - Mariana Haragus
10:00 - 10:30	Overview Talk - Mark Groves
10:30 - 11:00	Overview Talk - Guillaume James
11:00 - 11:30	Coffee Break – 8.526
11:30 - 12:15	C. Eugene Wayne: <i>Damped and Driven Breathers and Metastability in Hamiltonian Lattices</i>
12:15 - 12:45	Alexey Sukhinin: <i>Dynamics of Vortex Solitons in the Models Based on Multidimensional Vector NLS Systems</i>
12:45 - 14:00	Lunch Break
14:00 - 14:45	Wolfgang Reichel: <i>Breather solutions for a semilinear wave equation on periodic metric graphs</i>
14:45 - 15:30	Martina Chirilus-Bruckner: <i>Exotic fronts in a system of reaction-diffusion equations</i>
15:30 - 16:00	Coffee Break – 8.526
16:00 - 16:30	Bastian Hilder: <i>Moving modulating pulse and front solutions of permanent form in a FPU model with nearest and next-to-nearest neighbor interaction</i>
16:30 - 17:00	Shenglan Yuan: <i>Qualitative analysis of the high-order nonlinear Korteweg-de-Vries equation using dynamic renormalization approach</i>
18:15 - 19:00	Guided Tour in Stuttgart City Center

### Tuesday, 06.09.2022

9:00 - 9:45	Guillaume James: <i>Traveling fronts in dissipative granular chains</i>
9:45 - 10:30	Karsten Matthies: <i>Nonlinear stability of high-energy solitary waves in Fermi-Pasta-Ulam-Tsingou chains: using spatial dynamics and convolution operators to study spectral properties</i>
10:30 - 11:00	Coffee Break – 8.526
11:00 - 11:45	Michael Herrmann: <i>Spatial Dynamics and Nonlinear Eigenvalue Problems</i>
11:45 - 12:15	Eugene Kogan: <i>The Kinks, the Solitons and the Shocks in Series-Connected Discrete Josephson Transmission Lines</i>
12:15 - 13:30	Photo and Lunch Break
13:30 - 14:00	Timothy Faver: <i>Long Wave Nanopterons and Fronts in Dimer Fermi-Pasta-Ulam-Tsingou Lattices via Spatial Dynamics</i>
14:00 - 14:45	Mariana Haragus: <i>Regular patterns and defects: a spatial dynamics approach</i>
14:45 - 15:15	Giulio Romani: <i>Justification of the Asymptotic Approximation of Gap Solitons in Maxwell Equations by CMEs</i>
15:15 - 16:30	Poster Session and Coffee – 8.526
16:30	Hike to Bärensee with Biergarten

**Wednesday, 07.09.2022**

9:00 - 9:45	Mark Groves: <i>Doubly periodic travelling gravity-capillary and hydroelastic surface waves</i>
9:45 - 10:30	Evgeniy Lokharu: <i>Solitary waves over flows with critical layers and stagnation points</i>
10:30 - 11:00	Coffee Break – 8.526
11:00 - 11:30	Dan Hill: <i>Approximate Fully-Localised Dihedral Patterns Near a Turing Instability</i>
11:30 - 12:15	Miles H. Wheeler: <i>Spatial dynamics and internal waves of large amplitude</i>
12:15 - 13:00	Erik Wahlén: <i>Large-amplitude solitary waves for the Whitham equation</i>
13:00	Closing

## Poster:

<b>Zachary Adams M.Sc.</b> Max-Planck-Institut Leipzig	Quasi-ergodicity of transient patterns in parabolic SPDE
<b>Rami Ahmad M.Sc.</b> Universität des Saarlandes	A resonant Lyapunov centre theorem with an application to doubly periodic travelling hydroelastic waves
<b>Johannes Bärlin M.Sc.</b> Universität Konstanz	Spectral stability of shock profiles in hyperbolically regularized systems of conservation laws
<b>Lukas Bengel M.Sc.</b> Karlsruher Institut für Technologie	Analysis of Kerr frequency combs in silicon micro-resonators
<b>Olivia Cannon M.Sc.</b> University of Minnesota	Center manifolds for nonlocal systems
<b>Lucas Coeuret M.Sc.</b> Université Paul Sabatier	Green's function pointwise estimates for spectrally stable discrete shock profiles
<b>Nils Gutheil M.Sc.</b> Universität des Saarlandes	Pulse solutions to a class of quasilinear symmetrisable hyperbolic evolutionary equations over exponentially long time scales
<b>Jörg Weber M.Sc.</b> Lund Universitet	Large-amplitude steady gravity water waves with general vorticity and critical layers