

Seminar Working Group Nonlinear Partial Differential Equations

Winter Semester 2023

12.10.23 at 13:00 - [Matt Holzer](#) (Associate Professor @ George Mason University)
Pushed and pulled invasion fronts in parabolic PDEs

31.10.23 - [Yadong Liu](#) (Postdoctoral Researcher @ University of Regensburg)
On a compressible fluid-structure interaction problem with slip boundary conditions

07.11.23 - two talks

11:30-12:15 - [Olivia Cannon](#) (Doctoral Researcher @ University of Minnesota)
Shifting parties in social dynamics: a nonlocal approach

12:15-13:00 - [Michele Dolce](#) (Postdoctoral Researcher @ EPFL)
Stability threshold of the 2D Couette flow in a homogeneous magnetic field

14.11.23 - Niklas Knobel (Doctoral Researcher @ KIT)
On the Sobolev stability threshold for the 2D MHD equations for vanishing resistivity limit

21.11.23 - two talks

11:30-12:00 - [Dan Hill](#) (Postdoc @ Saarland University)
Going around in circles: Developing a functional analytic framework for radial solutions to PDEs
12:00-13:00 - Sebastian Ohrem (Doctoral Researcher @ KIT)
Breather solutions to quasilinear wave equations

28.11.23 - Julia Henninger (Doctoral Researcher @ KIT)
Rogue waves for a generalized semilinear wave equation

05.12.23 - two talks

11:30-12:30 - Robert Wegner (Doctoral Researcher @ KIT)
Long-wave approximation of the GP-hierarchy by the KdV-hierarchy
12:30-13:00 - [Shan Wang](#) (Doctoral Researcher @ UPEC)
Exponential decay estimates of Navier-Stokes system

12.12.23 - Kevin Drescher (Doctoral Researcher @ KIT)
Computer-assisted existence proofs for nonlinear boundary value problems

19.12.23 - Peter Lewintan (Research Assistant @ University Duisburg-Essen)
Optimal Korn-Maxwell-Sobolev inequalities

09.01.24 - Rebekka Zimmermann (Doctoral Researcher @ KIT)
Boussinesq equations with variable viscosity coefficient

16.01.24 - Lukas Bengel (Doctoral Researcher @ KIT)
Single- and multi-pulses in the two-mode forced Lugiato-Lefever equation

23.01.24 - Joannis Alexopoulos (Doctoral Researcher @ KIT)
Asymptotics and stability of large L^∞ -modulations of wave trains in reaction-diffusion systems

30.01.24 - Louis Garénaux (Postdoctoral Researcher @ KIT)
Stability of propagated fronts in scalar balance laws

06.02.24 - Lars Eric Hientzsch (Postdoc Fellow @ University of Bielefeld)
On the ill-posedness of the stably stratified Boussinesq equations in the class of bounded initial data

13.02.24 - [Timothée Crin-Barat](#) (Postdoctoral Researcher @ Friedrich-Alexander-Universität Erlangen)
Partially dissipative hyperbolic systems: hypocoercivity and hyperbolic approximations