

**Workshop 2 of the Thematic Programme on
“Nonlinear Waves and Relativity”****June 17 - 21, 2024****organized by****Roland Donniger (U of Vienna), David Fajman (U of Vienna),
Birgit Schörkhuber (U of Innsbruck)****• Monday, June 17th, 2024**09:00 – 09:30 **Registration**09:30 – 10:15 **Piero D’Ancona (U Roma 1, Sapienza)***Dispersion estimates for Dirac equations with Aharonov–Bohm magnetic fields*10:15 – 10:45 **Coffee Break**10:45 – 11:30 **Jonas Lührmann (TAMU, College Station)***Asymptotic stability of solitary waves for the 1D focusing cubic NLS under even perturbations*11:30 – 12:00 **Coffee Break**12:00 – 12:45 **Claudio Munoz (U de Chile, Santiago)***Kink dynamics for the Yang-Mills field in an extremal Reissner-Nordström black hole***• Tuesday, June 18th, 2024**09:15 – 10:00 **Tadahiro Oh (U of Edinburgh)***Fourier restriction norm method adapted to controlled paths*10:00 – 10:30 **Coffee Break**10:30 – 11:15 **Avy Soffer (Rutgers U)***Scattering Theory of Linear and Nonlinear Waves: A Unified New Paradigm*11:15 – 11:45 **Coffee Break**11:45 – 12:30 **Benoit Pausader (Brown U, Providence)***Landau damping around the Poisson equilibrium for the Vlasov-Poisson system*12:30 – 15:00 **Lunch Break**15:00 – 15:15 **Ambre Chabert (ENS Paris)***Weakly turbulent solution to the Schrödinger equation on the 2D torus with potential*15:15 – 15:30 **Ryan Martinez (UC, Berkeley)***The Modified Energy Method for a Nonlocal Quasilinear Wave Equation*15:30 – 15:45 **Alexander Wittenstein (KIT, Karlsruhe)***Existence and stability of corotational wave maps into perturbed spheres*

- **Wednesday, June 19th, 2024**

09:15 – 10:00 **J r mie Szeftel (Sorbonne U, Paris)**

The nonlinear stability of Kerr for small angular momentum

10:00 – 10:30 **Coffee Break**

10:30 – 11:15 **Alexandru Ionescu (Princeton U)**

On the stability of homogeneous equilibria of the Vlasov-Poisson system

11:15 – 11:45 **Coffee Break**

11:45 – 12:30 **Benjamin Dodson (Johns Hopkins U, Baltimore)**

Global well-posedness and scattering for the conformal nonlinear wave equation

12:30 – 15:00 **Lunch Break**

15:00 – 15:45 **Volker Schule (U Melbourne)**

Scattering problems with homogeneous asymptotics

18:30 – 22:00 **Conference Dinner at Feuerwehr-Wagner**

- **Thursday, June 20th, 2024**

09:15 – 10:00 **Andras Vasy (Stanford U)**

Waves on Kerr-de Sitter space

10:00 – 10:30 **Coffee Break**

10:30 – 11:15 **Jonathan Luk (Stanford U)**

High frequency spacetimes in general relativity

11:15 – 11:45 **Coffee Break**

11:45 – 12:30 **Micha  Wrochna (Utrecht U)**

Feynman problems for the Klein-Gordon and wave equation

12:30 – 15:00 **Lunch Break**

15:00 – 15:15 **Mahdi Haghshenas (Imperial College London)**

The effect of expansion and dispersion on waves in FLRW spacetimes with decelerated expansion

15:15 – 15:30 **Warren Li (Princeton U)**

Scattering towards the spacelike singularity in Kasner spacetimes

15:30 – 15:45 **Istvan Kadar (U of Cambridge)**

Construction of multi-soliton solutions for semilinear equations in dimension 3

- **Friday, June 21st, 2024**

09:15 – 10:00 **Susanna Haziot (Brown U)**

Desingularization and long-term dynamics of solutions to fluid models

10:00 – 10:30 **Coffee Break**

10:30 – 11:15 **Klaus Kr ncke (KTH Stockholm)**

A volume-renormalized mass for asymptotically hyperbolic manifolds

All talks take place at ESI Boltzmann Lecture Hall!