Session 9 Qualitative Properties of Evolution Models

Organisers:

K. Yagdjian, F. Hirosawa (Yamaguchi), M. Reissig (Freiberg)

Day 1 Monday

14:30-15:00 Marcelo Ebert Diffusion phenomena for the wave equation with structural damping in the L^p-L^q framework

15:00-15:30 Marcello DAbbicco An application of L^p-L^q decay estimates to the semilinear wave equation with a structural damping

15:30-16:00 Takashi Narazaki Asymptotic behavior of solutions to damped wave equation with derivative nonlinear term

16:00-16:30 Coffee/tea break

16:30-17:00 Akisato Kubo Nonlinear Wave Equations with Strong Dissipation and Proliferation

17:00-17:30 Michael Dreher Dissipativity for mixed order systems

17:30-18:00 Nunez Wanderley Nascimento Klein-Gordon type wave models with non-effective time-dependent potential

Day 2 Tuesday

12:10-12:40 Jens Wirth Diffusion phenomena for partially dissipative hyperbolic systems

12:40-13:10 Tang Bao Ngoc Bui Global existence of small data solutions for semi-linear damped wave equations

13:10-14:30 Lunch break

14:30-15:00 Alessia Ascanelli The Cauchy problem for higher order p-evolution equations

15:00-15:30 Michael Reissig Well-posedness for degenerate Schrödinger equations

15:30-16:00 Christian Jaeh Recent results on uniqueness and continuous dependence in the Cauchy problem for backward-parabolic operators with low-regular coefficients

16:00-16:30 Coffee/tea break

16:30-17:00 Rainer Picard Evolutionary Equations with Material Laws Containing Fractional Integrals

17:00-17:30 Gurgen Hayrapetyan Spectra of functionalized operators arising from hypersurfaces

17:30-18:00 Ruben Hayrapetyan Asymptotics in a complex frequency domain and GPR problems

Day 3 Thursday

12:10-12:40 Kenji Nishihara The Cauchy problem for a coupled system of the damped wave equations

12:40-13:10 Gerard Misiolek Examples of ill-posedness for the Euler and the quasi-geostrophic equations

13:10-14:30 Lunch break

14:30-15:00 Tohru Ozawa Hardy type inequalities on balls

15:00-15:30 Andrei Faminskii Initial-boundary value problems for

Zakharov-Kuznetsov equation on the plane

15:30-16:00 Lavi Karp Well-posedness of coupled first and second order hyperbolic systems

16:00-16:30 Coffee/tea break

16:30-17:00 Tacksun Jung Weak solutions for the singular potential wave System

17:00-17:30 Q-Heung Choi Bounded weak solution for the Hamiltonian system

17:30-18:00 Ingo Witt Degenerate pseudodifferential operators of Vishik-Grushin type

Day 4 Friday

12:10-12:40 Seiichiro Wakabayashi Singularities of solutions to the Cauchy problem for a class of second-order hyperbolic operators

12:40-13:10 Tatsuo Nishitani A remark on the local and microlocal Cauchy problem for noneffectively hyperbolic operators

13:10-14:30 Lunch break

14:30-15:00 Mitsuru Sugimoto A vector fields approach to smoothing and decaying estimates for equations in anisotropic media

15:00-15:30 Fumihiko Hirosawa On second order weakly hyperbolic equations and the ultradifferentiable classes

15:30-16:00 Makoto Nakamura Energy solutions for nonlinear Klein-Gordon equations in de Sitter spacetime

16:00-16:30 Coffee/tea break

16:30-17:00 Anahit Galstyan Microlocal Analysis for Hyperbolic Equations in the Einstein & de Sitter Spacetime

17:00-17:30 Karen Yagdjian The hyperbolic equations in the curved spacetime