

istanbul matematiksel bilimler merkezi istanbul center for mathematical sciences

Workshop on Nonlinear Dispersive PDE

LONG TIME DYNAMICS, BOUNDARY VALUE PROBLEMS, INTEGRABILITY

This workshop aims at bringing renowned experts working on dispersive PDEs together so as to discuss recent developments and future perspectives of the field. Research interests of the invited speakers cover some of the major approaches to dispersive PDEs. We presume the whole program will help all the participants develop a solid viewpoint toward the field and enhance the understanding of researchers working on dispersive PDEs.

Speakers:

- Dario Bambusi (University of Milan)
- Aynur Bulut (University of Michigan)
- Zaher Hani (Georgia Institute of Technology)
- Varga Kalantarov (Koç University)
- Nobu Kishimoto (Kyoto University)
- Luc Molinet (François Rabelais University of Tours)
- Beat Raphael Schaad (University of Kansas)
- Edriss Titi (Texas A&M University and Weizmann Institute of Science)
- Nikos Tzirakis (University of Illinos at Urbana-Champaign)

Program:

Monday

09.30-10.20: Varga Kalantarov (Koç University) Blow up and preventing blow up of solutions of nonlinear PDEs

10.50-11.40: Nobu Kishimoto (Kyoto University) *Unconditional uniqueness for nonlinear dispersive equations*

14.00-14.50: Nikos Tzirakis (University of Illinos at Urbana-Champaign) The initial and boundary value problem for the cubic nonlinear Schrödinger equation

Tuesday

09.30-10.20: Dario Bambusi (University of Milan) Dynamics of a soliton in an external potential

10.50-11.40: Luc Molinet (François Rabelais University of Tours) Improvement of the energy method for strongly non-resonant dispersive equations and applications

14.00-14.50: Zaher Hani (Georgia Institute of Technology) Long-time dynamics and turbulence of nonlinear waves

15.20-16.10: Beat Raphael Schaad (University of Kansas) *Smoothing results for integrable equations*

Wednesday

09.30-10.20: Aynur Bulut (University of Michigan) Negative energy blowup for the focusing Hartree hierarchy via identities of virial and localized virial type

10.50-11.40: Edriss Titi (Texas A&M University and Weizmann Institute of Science) Is dispersion a stabilizing or destabilizing mechanism?

Date: July 11-13, 2016

Place: IMBM Seminar Room, Boğaziçi University South Campus

For more information please visit http://www.imbm.org.tr/ndpde16/ndpde16.html.

