

The Fifth Oklahoma PDE Workshop

Oklahoma State University
February 28-March 1, 2015

Schedule

All talks are in Room 514 in Mathematical Sciences Building (MSCS). Breakfasts, lunches and coffee breaks are in Room 519 in MSCS.

Saturday, February 28

8:00 - 8:50 am **Breakfast and Check-in** @ 519 MSCS

Session Chair: Igor Kukavica

8:50 - 9:45 am **Edriss S. Titi, The Weizmann Institute of Sciences and Texas A&M University**
Title: Is Dispersion a Stabilizing or Destabilizing Mechanism?

9:50 – 10:25 am **Evelyn Lunasin, U.S. Naval Academy**
Title: Finite Determining Parameters Feedback Control for Distributed Nonlinear Dissipative Systems -- a Computational Study

10:25 – 10:40 am **Coffee Break** @ 519 MSCS

10:40 - 11:35 am **Xiaojing Xu, Beijing Normal University**
Title: Some Recent Results on the Global Well-Posedness of Boussinesq Systems

11:40 – 12:15 pm **Kazuo Yamazaki, Washington State University**
Title: Recent Developments on the Micropolar and Magneto-Micropolar Fluid Systems: Deterministic and Stochastic Perspectives

12:15 – 1:40 pm **Lunch** @ 519 MSCS

Session Chair: Walter Rusin

- 1:40 - 2:35 pm **Igor Kukavica, University of Southern California**
Title: On Conditional and Partial Regularity for the Navier-Stokes Equations
- 2:40 - 3:15 pm **Vu Hoang, Rice University**
Title: Double-Exponential Growth for Smooth Solutions of the 2D Euler Equations
- 3:20 - 3:55 pm **Jingna Li, Jinan University and Oklahoma State University**
Title: The Fractional Landau-Lifshitz Equation without Damping Term and Fractional Ginzburg-Landau Equation
- 3:55 - 4:10 pm **Coffee Break @ 519 MSCS**
- 4:10 - 4:45 pm **Lizheng Tao, University of Illinois at Urbana-Champaign**
Title: Wave Breaking for a System of Shallow Water
- 4:50 - 5:25 pm **Fei Wang, University of Southern California**
Title: Weighted Decay for the Surface Quasi-Geostrophic Equation
- 5:50 pm **Dinner at a local restaurant**

Sunday, March 1

Session Chair: Edriss S. Titi

8:00 - 8:50 am **Breakfast @ 519 MSCS**

9:00 -9:35 am **Jinkai Li, The Weizmann Institute of Sciences and Texas A&M University**
Title: The Primitive Equations with Partial Dissipation

9:40 -10:15 am **Tam Do, Rice University**
Title: On a 1D Model for Equations in Fluid Mechanics

10:15 -10:30 am **Coffee Break @ 519 MSCS**

10:30 -11:05 am **Xiaoqian Xu, University of Wisconsin at Madison**
Title: Mixing of Passive Scalars Advected by Incompressible Enstrophy-Constrained Flows

11:10-11:45 am **Haifeng Shang, Henan Polytechnic University and Oklahoma State University**
Title: Cauchy Problem for Nonlinear Parabolic Equations with a Gradient Term