

Recent Advances on Particle Systems in Kinetic Theory

A celebration of Sasha Bobylev's impact in the mathematics and computations of kinetic theory

May 8 - 12, 2017

**Institute for Computational Engineering and Sciences (ICES)
The University of Texas at Austin**



Interacting particle transport or kinetic collisional modeling was introduced in the last quarter of the nineteenth century by L. Boltzmann and J.C. Maxwell, independently, giving birth to the area of mathematical Statistical Mechanics and Thermodynamics. These types of evolution models concern a class of non-local, and non-linear integro-differential problems whose rigorous mathematical and numerical approximating treatments are at the center of current scientific developments.

Their applications range from rarefied elastic and inelastic gas dynamics including very low temperature regimes for quantum interactions, collisional plasmas and electron transport in nanostructures, to self-organized or social interacting dynamics.

This event is dedicated to A.V. Bobylev on his seventieth birthday.

INVITED LECTURES

Ricardo Alonso, PUC-Rio de Janeiro
Kazuo Aoki, Kyoto U
Claude Bardos, U.Paris VII
Niclas Bernhoff, Karlstad U, Sweden
Alexander (Sasha) Bobylev, KIAM, Moscow
Russel Caflisch, UCLA
Silvia Caprino, U. di Roma, Tor-Vergata
Raffaele Esposito, U degli Studi Dell'Aquila
Francis Filbet, Paul Sabatier U, Toulouse,
François Golse, École Polytechnique, Paris
David Goldstein, UT Austin
Yan Guo, Brown U
Reinhard Illner, U of Victoria, Canada
Shi Jin, UW-Madison
Xuguang Lu, Tsinghua U
Rossana Marra, U di Roma
Anne Nouri, Aix-Marseille U
Lorenzo Pareschi, U. de Ferrara
Irina Potapenko, KIAM, Moscow
Mario Pulvirenti, U di Roma La Sapienza
Sergej Rjasanow, U of Saarlandes
Giovanni Russo, U di Catania
Sergio Simonella, TU München
Robert Strain, U Penn
Shigeru Takata, Kyoto U
Phillip Varghese, UT Austin
Alex Vasseur, UT Austin
Bernt Wennberg, Chalmers U, Sweden
Tong Yang, City U Hong Kong

SCIENTIFIC COMMITTEE / ORGANIZERS

Kazuo Aoki, Kyoto U
Irene M. Gamba, UT Austin
Reinhard Illner, U of Victoria, Canada
Giovanni Russo, U di Catania
Alex Vasseur, UT Austin
Bernt Wennberg, Chalmers U, Sweden

CONFERENCE WEBSITE AND PROGRAM:

<http://www.ma.utexas.edu/ract-2017/>

Email contact: rgeorge@ices.utexas.edu

Applications for participation can be made through the [Online Application](#). Due to space limitations, these requests are subject to approval by the organizers

The activity is sponsored by the RNMS: Kinetic description of emerging challenges in multi-scale problems of natural Sciences (Ki-Net).

Funding is provided by NSF and ICES.

