



## The Boltzmann Equation: DiPerna-Lions Plus 20 years



• April 15 – 17, 2009

**ORGANIZING COMMITTEE:** IRENE GAMBA (University of Texas in Austin), REINHARD ILLNER (University of Victoria), DAVID LEVERMORE (University of Maryland), LAURE SAINT RAYMOND (Université de Paris VI), MARSHALL SLEMROD (University of Wisconsin-Madison)

### Scientific Overview

Over the last two decades there has been significant progress in the mathematical analysis of kinetic equations, in particular the Boltzmann and Vlasov type particle evolution equations. Areas of discussion of this three-day workshop will include the spatially homogeneous and inhomogeneous Boltzmann equation, their hydrodynamic limits, and collisionless Vlasov models in plasma in the classical and relativistic framework with the coupling to Maxwell-Poisson systems. It is the aim of this workshop to bring together scientists from mathematics, physics, statistical physics, and related disciplines. It will entertain both survey lectures and more technical talks.

### Confirmed Speakers

**Kazuo Aoki** (Kyoto University); **Laurent Desvillettes** (École Normale Supérieure de Cachan); **Irene Gamba** (University of Texas, Austin); **Robert Glassey** (Indiana University); **Francoise Golse** (École Polytechnique); **S.-Y. Ha** (Seoul National University); **Reinhard Illner** (University of Victoria); **Dave Levermore** (University of Maryland); **Tai-Ping Liu** (Stanford University); **Vladislav Panferov** (CSU, Northridge); **Sergej Rjasanow** (Universität des Saarlandes); **Robert Strain** (Harvard University); **S.-H. Yu** (National University of Singapore)

### Long Program Schedule

This workshop is part of the long program “Quantum and Kinetic Transport: Analysis, Computations, and New Applications”

- Tutorials, March 9 -13, 2009
- Workshop 1: Computational Kinetic Transport and Hybrid Methods, March 30 - April 3, 2009
- **Workshop 2: The Boltzmann Equation: DiPerna-Lions Plus 20 years, April 15 - 17, 2009**
- Workshop 3: Flows and Networks in Complex Media, April 27 - May 1, 2009
- Workshop 4: Asymptotic Methods for Dissipative Particle Systems, May 18 - 22, 2009

### Participation

Additional information about this workshop including links to register and to apply for funding, can be found on the webpage listed below. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission, and we welcome their applications.

[www.ipam.ucla.edu/programs/ktws2](http://www.ipam.ucla.edu/programs/ktws2)



UCLA

IPAM is an NSF funded institute

