Center for Scientific Computation And Mathematical Modeling



Kinetic Description of Multiscale Phenomena: Modeling, Theory, and Computation an NSF Focus Research Group University of Maryland, College Park



Workshop Announcement

Kinetic Description of Multiscale Phenomena The 2011 Annual Kinetic FRG Meeting May 23-27, 2011

Van Vleck Hall, Department of Mathematics University of Wisconsin-Madison

Organizers

Shi Jin Eitan Tadmor University of Wisconsin-Madison University of Maryland

Confirmed Participants

Kazuo Aoki **Agisilaos Athanasoulis Claude Bardos** Andrea Bertozzi **Russel Caflisch Peter Constantin Miguel Escobedo Gregory Forest Irene Gamba Francois Golse Manoussos Grillakis** Yan Guo **Cory Hauck Darryl Holm Pierre-Emmanuel Jabin** Shi Jin **Dave Levermore Hailiang Liu Tai-Ping Liu** Peter Markowich **Benedetto Piccoli Christian Ringhofer** Laure Saint-Raymond **Robert Strain** Weiran Sun **Eitan Tadmor Athanasios Tzavaras Bernt Wennberg**

Kyoto University École Polytechnique University of Paris VII University of California, Los Angeles University of California, Los Angeles University of Chicago University of Bilbao University of North Carolina at Chapel Hill University of Texas at Austin École Polytechnique-Paris University of Maryland **Brown University** Oak Ridge National Laboratory Imperial College London University of Nice University of Wisconsin-Madison University of Maryland Iowa State University Stanford University

University of Cambridge University of Rutgers-Camden Arizona State University École Normale Supérieure University of Pennsylvania University of Chicago University of Chicago University of Crete University of Crete



 $\frac{\partial f}{\partial t} + v \frac{\partial f}{\partial x} + \frac{F}{m} \frac{\partial f}{\partial v}$

Scientific Background

Kinetic descriptions play a critical role in the physical, social, and biological sciences, and have expanded into diverse applications of cutting-edge technology ranging from microfluidics, semiconductors, polymers and plasma to traffic networking and swarming. Modern kinetic theory captures fundamental issues in the modeling and simulation of phenomena across length and time scales, from the atomistic to the continuum. In the context of kinetic theory mathematical approaches help the design of numerical methods and, numerical simulations conversely, help improve the quantitative understanding of underlying complex problems.

A limited number of openings are available. Limited funding support is available, especially for researchers in the early stages of their career who want to attend the full program. To apply, complete the online application before March 4, 2011: www.cscamm.umd.edu/frg/frg11/rsvp.htm For more information:

Website: www.cscamm.umd.edu/frg/frg11 Email: frg11@cscamm.umd.edu



This meeting is in conjunction with Dave Levermore's 60th birthday.

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