



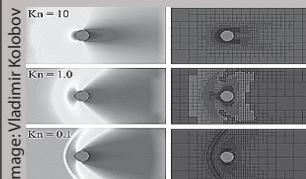
ICERM

Institute for Computational and Experimental Research in Mathematics

Upcoming Topical Workshop

Issues in Solving the Boltzmann Equation for Aerospace Applications

June 3 – 7, 2013



The goal of this five-day workshop is to facilitate the development of high-fidelity computational capabilities for the solution of the Boltzmann equation in application to simulation of non-continuum flows. This will be accomplished by addressing the gaps in communication between mathematicians, engineers and researchers in various fields of research.

Topics of the workshop include but are not be limited to: different forms of the Boltzmann equation; reduced order models for the Boltzmann equation; mesh adaptation in velocity space; fast evaluation of the Boltzmann collision integral; simulations that account for real gas effects and chemical and electromagnetic interaction of particles; complex geometry simulations; coupling of continuum and non-continuum models; and quantification of numerical error and uncertainty of simulations.

Organizing Committee:

Alex Alekseenko, California State University, Northridge/
Air Force Research Laboratory at Wright-Patterson Air
Force Base

Jose Camberos, Air Force Research Laboratory at
Wright-Patterson Air Force Base

Irene Gamba, University of Texas at Austin

Sergey Gimelshein, University of Southern California

Prakash Vedula, University of Oklahoma, Norman

Ingrid Wysong, Air Force Office of Scientific Research

To learn more about this and other ICERM programs, organizers, confirmed program participants, and to submit an application, please visit our website:

<http://icerm.brown.edu>

Participation: Applications are now being accepted. Support for local expenses may be provided. Decisions about online applications are typically made 1–3 months before the program, as space and funding permit. ICERM encourages women and members of underrepresented minorities to apply.

About ICERM: The Institute for Computational and Experimental Research in Mathematics is a National Science Foundation Mathematics Institute at Brown University in Providence, Rhode Island. Its mission is to broaden the relationship between mathematics and computation.

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