Topical Workshop

MAY 17-21, 2021

Advances and Challenges in Hyperbolic Conservation Laws

Organizing Committee:

Alberto Bressan, The Pennsylvania State University
Gui-Qiang Chen, University of Oxford
Constantine Dafermos, Brown University
Fengyan Li, Rensselaer Polytechinic Institute
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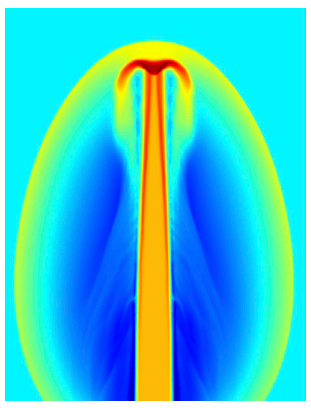
Konstantina Trivisa, University of Maryland
Dehua Wang, University of Pittsburgh



IN THE FIELD OF hyperbolic conservation laws, theory, computation, and applications are deeply connected, with each one providing to the other two technical support as well as insights. Major progress has been achieved, over the past 40 years, on the theory and computation of solutions in one space dimension. By contrast, the multi-space dimensional case is still covered by mist, which is now gradually lifting, revealing new vistas.

This workshop brings together researchers in hyperbolic conservation laws to present the most significant theoretical and computational advances and discuss applications as well as challenges. The aim of the workshop is to explore the connections among theoretical, numerical, and applied aspects related to hyperbolic conservation laws, and stimulate discussions and collaborations among these areas. The face-to-face communication of the participants in the workshop will be a catalyst for scientific progress in theory, numerics, and applications.

Confirmed Speakers:

Suncica Canic, University of Houston
Alina Chertock, NC State University
Cleopatra Christoforou, University of Cyprus
Bernardo Cockburn, University of Minnesota
Mihalis Dafermos, Princeton University
Camillo De Lellis, IAS
Eduard Feireisl, Czech Academy of Sciences
Mikhail Feldman, University of Wisconsin
Ulrik Fjordholm, University of Oslo
James Glimm, Stony Brook University
Sigal Gottlieb, UMASS Dartmouth
Feimin Huang, Chinese Academy of Science
John Hunter, University of California Davis
Denis Serre, Ecole Normale Supérieure de Lyon
Wen Shen, Penn State University
Marshall Slemrod, University of Wisconsin
Laura Spinolo, IMATI-CNR
Athanasios Tzavaras, King Abdullah University of Science and Technology
Alexis Vasseur, University of Texas Austin
Franziska Weber, Carnegie Mellon University

ICERM

Participation

ICERM anticipates that all scientific programming through 2021 will be made available virtually for those unable to travel to the institute, whether due to the pandemic or any other reason.

Most ICERM workshops are aimed at scientists and students who are actively involved in the topic of the workshop. To request an invitation to participate, complete an online application available on our website. Decisions are typically made several weeks before the workshop; late registrants who are accepted and plan to participate virtually may not receive Zoom credentials until the first day of the program.

ICERM encourages women and members of underrepresented minorities to apply.

About ICERM

The Institute for Computational and Experimental Research in Mathematics (ICERM) is a National Science Foundation Mathematics Institute at Brown University in Providence, RI. Its mission is to broaden the relationship between mathematics and computation: specifically, expand the use of computational and experimental methods in mathematics, support theoretical advances related to computation, and address problems posed by the existence and use of the computer through mathematical tools, research and innovation.

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