

---

# Call for Organizers 2010 MRC Conferences

The American Mathematical Society invites individuals and groups of individuals to serve as organizers of summer conferences of the Mathematics Research Communities program to be held in Snowbird, Utah, in the summer of 2010.

## About the Mathematics Research Communities Program

Mathematics Research Communities (MRC), a newly-established program of the American Mathematical Society (AMS), nurtures early-career mathematicians—those who are close to finishing their doctorates or have recently finished—and provides them with opportunities to build social and collaborative networks through which they can inspire and sustain each other in their work. The structured program is designed to engage and guide all participants as they start their careers. The program includes one-week summer conferences for each topic; Special Sessions at the national meeting; discussion networks by research topic; ongoing mentoring; and a longitudinal study of early career mathematicians. Those accepted into this program will be fully supported for the summer conference, and will be partially supported for their participation in the following Joint Mathematics Meetings. The summer conferences of the MRC are held in the breathtaking mountain setting of the Snowbird Resort, Utah, where participants can enjoy the natural beauty and a collegial atmosphere. The MRC program is open to individuals who are U.S. citizens as well as to those who are affiliated with U.S. institutions. Women and underrepresented minorities are especially encouraged to participate.

The Division of Meetings and Professional Services of the AMS coordinates the Mathematics Research Communities program, and supports organizers throughout the entire program. Questions about the overall MRC program should be addressed to Ellen J. Maycock, Associate Executive Director, at [ejm@ams.org](mailto:ejm@ams.org) or 401-455-4101.

## Summer Conferences

The American Mathematical Society's Meetings and Conferences staff members arrange all the logistics of the summer conferences for the Mathematics Research Com-

munities program. This administrative support allows organizers to focus almost exclusively on providing a high-quality scientific program and enables both organizers and participants to concentrate on the conference and take advantage of the services, venue, and surrounding attractions. The AMS Meetings and Conferences Department provides general information and details online at <http://www.ams.org/amsmtg/mrc.html>.

The program pays for air transportation for all organizers and participants, as well as room and board for the stay at Snowbird and transportation by van from the Salt Lake City airport to the resort and back. Each organizer receives a stipend of US\$3,000. Additionally, each organizing committee has the option of hiring a graduate student to assist with work before and during the conference, for a stipend of US\$3,000. Young mathematicians apply to be participants in the MRC program by March 1, 2010. The organizers of each summer conference choose among these applicants during the month of March 2010, paying special attention to creating a diverse group of participants. Although the main emphasis of the summer conferences is the scientific program, it is important for the organizers to spend time with participants discussing professional development topics, such as the job search, writing grant proposals, giving talks, and other activities.

## How To Apply

Members of the MRC Advisory Board and AMS staff members are pleased to provide guidance on the preparation of proposals. Core funding for the MRC program is provided by a grant from the National Science Foundation.

## Proposals

The MRC Advisory Board encourages individuals to submit inquiries to ensure sufficient time for feedback. Proposals need to include the following information:

- (1) Organizing Committee members, with names and addresses (4–5 for a 40-participant conference, 2–3 for a 20-participant conference);
- (2) Scientific narrative addressing the focus, importance and timeliness of the topic, no more than 5 pages long;

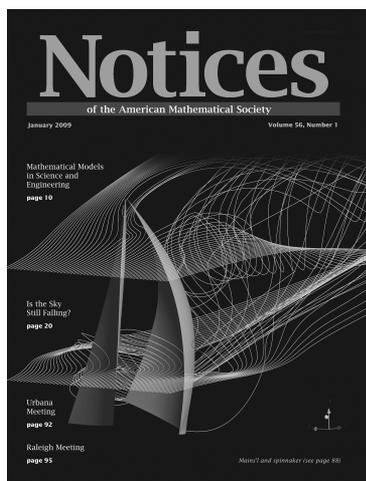
## About the Cover

### Mains'l and spinnaker

This month's cover accompanies the article on mathematical modeling in this issue by Alfio Quarteroni. The image was produced by Nicola Parolini, assistant to Quarteroni, who writes, "The image shows two layers of streamlines at different heights around a gennaker (a gennaker is a modern hybrid between a spinnaker and a genoa) and a main sail of an America's Cup boat. They were computed based on the velocity obtained by the solution of the Reynolds-Averaged Navier-Stokes equations (using the software Ansys CFX) which model the air flow around deformable membranes representing the sails. The computational grid had about 15 million elements (tetrahedra) and was built using the mesh generation software Ansys IcemCFD.

"The main objective of this analysis was the maximization of the total driving force as a function of sail trimming by solving the fluid-structure interaction analysis on sails. The simulation converged in 5 coupling iterations, when the difference of forces on both sails with respect to the previous coupling has been found to be less than 0.5%. Each coupling iteration took about 2 hours, running in parallel over 62 processors. The picture highlights the flow structures and the wakes around the sails given one particular set of trimmings among several different possible sailing configurations. The large separation occurring at the gennaker's leading edge reveals that this configuration is not optimal and suggests pulling in the gennaker sheet (that is the cable attached to the gennaker leech-foot corner) which governs the gennaker's angle of attack."

—Bill Casselman, Graphics Editor  
([notices-covers@ams.org](mailto:notices-covers@ams.org))



(3) Organization of the week of the summer conference.

Preparation and submission guidelines are available at <http://www.ams.org/amsmtgs/mrc-proposals.html>. The current MRC Advisory Board members are listed at <http://www.ams.org/amsmtgs/mrc-contact.html>.

Send inquiries and proposals to:

Mathematics Research Communities  
American Mathematical Society  
by email: [mrc2010@ams.org](mailto:mrc2010@ams.org)  
by mail: 201 Charles Street, Providence, RI 02904  
by fax: 401-455-4004

### Deadlines for 2010 MRCs

Intent to submit proposal: **March 2, 2009**

Proposals: **April 1, 2009**

All individuals who submit proposals will be notified of the decisions before August 3, 2009.

### About Snowbird Resort

Situated in a beautiful, breathtaking mountain setting, Snowbird Resort provides an extraordinary environment for the MRC program. The atmosphere is comparable to the collegial gatherings at Oberwolfach and other conferences that combine peaceful natural ambience with stimulating meetings. MRC participants have access to a range of activities such as a tram ride to the top of the mountain, walking and hiking trails in the surrounding mountains, and swimming in heated outdoor pools. Participants also enjoy the simpler pleasures of convening on the patios at the resort to read, work, and socialize. At the conclusion of the day's program colleagues may enjoy informal gatherings to network and continue discussion of the day's sessions over refreshments. Within a half hour of the University of Utah, Snowbird is easily accessible from the Salt Lake City International Airport. For more information about Snowbird Resort, see <http://www.snowbird.com>.

*For myself and many others in mathematics, mentoring strong, eager students in small groups is one of the most rewarding things we do. Imagine the opportunity to choose a group of advanced graduate students and beginning post-docs in your field, from around the country, and spend an intense week getting to know them and helping them learn some new and valuable elements of your field.*

—David Eisenbud, Chair, MRC Advisory Board

—Ellen J. Maycock  
Associate Executive Director  
Meetings and Professional Services