

Mixing Studies: What Goes into a Successful SIAM Meeting?

This month's note will be a brief one—SIAM president Tom Manteuffel is away on travel to China, and this is a busy season in the SIAM office. Most of us here in Philadelphia are focused on preparations for the SIAM Annual Meeting in San Diego, and all the committee, council, and board meetings that go along with it.

Even with the annual meeting fast approaching, I feel as if I've just returned from the most recent SIAM Conference on Applications of Dynamical Systems (May 20–24) in Snowbird, Utah. This is always an outstanding conference with a strong multidisciplinary focus, and this year's was no exception (see Barry Cipra's report on page 1 in the July/August issue for highlights).

A hallmark of the dynamical systems conference is the many lively, collegiate discussions that arise. One of my personal highlights was just such a discussion, following the first invited talk—Jerry Gollub's presentation of experimental results on 2-

D mixing. In one experiment the researchers were looking at transient mixing, where an inhomogeneous distribution is mixed until homogeneity results. A terrific discussion ensued about the role of stretching (characterized by the eigenvalues of $(\text{grad } \phi)^T (\text{grad } \phi)$, where ϕ is the evolution operator) as opposed to diffusion (characterized by the Peclet number) in determining mixing. Many members of the audience had suggestions and analyses to offer, until time constraints forced the discussion to move off-line.

TALK OF THE SOCIETY

*By Thomas Manteuffel
and James Crowley*

Mixing seems to me to be a theme of this conference—not necessarily mixing of fluids, but mixing of people from a variety of departments and backgrounds who share an interest in dynamical systems and their applications. And it is this mixing that always makes the dynamical systems conference so

stimulating. Physics, biology, mathematics—experimental, analytical, computational—many viewpoints and perspectives are represented, and it's the exchange of ideas and information that propels this group forward.

The SIAM annual meeting is also a “mixer” (this brings back bad college memories!), but one of a different sort. The annual meeting is one event that brings the entire SIAM membership together, with opportunities to share information across a broader audience than at the more narrowly focused technical meetings. Those who attend have the chance to network, meet old friends, and make some new ones. The annual meeting is also intended to provide opportunities for professional development—extending beyond a narrow focus on research to other areas, such as advocacy, general education, and career alternatives.

Barbara Keyfitz, our vice president for programs, has a small working group looking at ways to enhance our annual meetings. As SIAM programs have grown and members' areas of interest have evolved, the annual meeting may not have kept pace. This is not to say that we have not had some outstanding annual meetings in recent years. The most recent meeting in Stanford (in 1997), organized by Gene Golub, was our largest ever. And the meeting this year in San Diego has what promises to be a strong program, especially since it will be complemented by our largest ever conference on control during the same week.

But SIAM annual meetings should be special, and they should certainly serve the breadth of our membership. The working group on the annual meeting, established to ensure that we are meeting this goal, is looking for new ideas to ensure that the annual meetings continue to support our membership and provide a worthwhile experience for everyone in the community, whether students, senior researchers, or people seeking to learn about fields represented by SIAM members.

If you have suggestions or concerns about our annual meetings, please contact Barbara Keyfitz (keyfitz@uh.edu) or me (jcrowley@siam.org).

The next annual meeting—our 50th Anniversary Meeting, in Philadelphia—already promises to be something special. Co-organizers Margaret Wright and Marty Golubitsky are putting together a program with many novel aspects, including more invited presentations (some in parallel) and some tutorial talks. With threads woven through the program, the meeting will represent all the major areas covered by SIAM. Also planned are special events designed to bring together many of the old friends who have helped SIAM become what it is. These events will have us all reminiscing a bit, but the focus of the meeting is on the future, with speakers giving a sense of where the discipline is headed and a taste of the challenges that lie ahead.

So mark your calendars: July 7–13, 2002, and plan to meet in Philadelphia. Meanwhile, keep an eye on the SIAM Web site (www.siam.org) for further information.