Report on SIAM Applied Linear Algebra Conference, Monterey CA, Oct 26-29, 2009

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The 10th SIAM Conference on Applied Linear Algebra took place in Monterey, California, on Oct. 26-29, 2009. It was a record breaking meeting: over 200 minisymposia talks (almost double compared to the 2006 meeting!), along with approximately 80 contributed talks and 11 plenary talks, brought the overall number of presentations beyond 300. The participants were certainly spared of the need to think about how to fill their day. Talks went on from 8am to as late as 10pm in two of the evenings, featuring no less than six parallel sessions. And there were plenty of other activities: a SIAG/LA business lunch, a conference banquet, a forward looking panel discussion, and much more.

Over 300 participants braved the harsh California weather conditions of approximately 20 degrees (Celcius) and beautiful sunshine, and spent the week at the glamorous Monterey Bay of California, located about 100 miles south of San Francisco. The Embassy Hotel, where the meeting took place, was pleasant, and the facilities were excellent.

The plenary talks were remarkably diverse and of a very high quality. The speakers, in order of their appearance, were: Andy Wathen, Oxford (preconditioners for PDE-constrained optimization), Michele Benzi, Emory (matrix functions), Shaun Fallat, Regina (ILAS speaker - matrix factorizations and total positivity), Karen Wilcox, MIT (model reduction), Françoise Tisseur, Manchester (quadratic eigenvalue problems), Christian Mehl, TU Berlin (ILAS speaker - indefinite linear algebra), Hugo Zaragoza, Yahoo! (link graphs), Michael Ng, Hong Kong (data mining and image processing), Zlatko Drmač, Zagreb (SIAG/LA Best Paper Prize - see more below), Dianne O'Leary, Maryland (confidence in image reconstruction), Michael Friedlan-

der, UBC (sparse optimization), and Dan Spielman, MIT (combinatorial solution of systems with M-matrices).

There were two history sessions, featuring four speakers in each, over the course of two evenings. Drawing lessons from the previous meeting in Dusseldorf, where those talks were a huge draw but were scheduled in parallel with other talks, this time the history sessions stood alone as single sessions. They were very well attended despite the late hour of 8pm-10pm.

The SIAG/LA business lunch meeting was run by the activity group's Chair, Daniel Szyld, who updated the SIAG members with the state of affairs in the group. Daniel described the activities that the SIAG has been involved with (such as the summer school in Spain in 2007), some statistics about the attendance of SIAG members in recent meetings, and the upcoming election of new officers. The SIAG/LA best paper prize was also announced: Z. Drmač and K. Veselić, for their paper, *New Fast and Accurate Jacobi SVD Algorithm*, published in SIMAX in 2008.

Just to make sure no time was wasted on activities not involving talking linear algebra, a panel on the role of linear algebra in industrial applications took place on the third day, over lunch time. The session was moderated by Mark Embree, along with the panelists Iain Duff, Roger Grimes, Volker Mehrmann, and Rosemary Renaut.

The conference banquet featured a choice of salmon or chicken, but no alcohol, unless you wanted to add more to the already hefty dinner fee. (The hotel bar must have been grateful for that – everybody flocked to the lobby after dinner to get their fix.) The after-dinner speaker, Beresford Parlett from Berkeley, did not spare words to share with us a few well kept secrets from his days as a graduate student. We would share those with you, but in the spirit of "what happens in SIAM ALA stays in SIAM ALA", let us leave it at this...

Altogether, it was a most enjoyable meeting, with excellent talks and a wonderful diversity of topics. Special thanks go to Esmond Ng, the meeting's Chair, for successfully taking on the momentous task of planning and running the meeting. Daniel Szyld, the SIAG/LA Chair, also played an important role in assuring the success of the meeting.

The next SIAM Applied Linear Algebra conference is scheduled to take place in Valencia, Spain, on June 18-22, 2012. The local organizers are Rafael Bru and José Mas.