The Tenth Copper Mountain Conference on Multigrid Methods

The first Copper Mountain Conference on Multigrid Methods was organized in 1983 by Steve McCormick, then a professor in the math department at Colorado State University. Steve paid the deposit and held his breath to see if anyone would attend. The first meeting was a resounding success and a series of bi-annual conferences began. The first meeting had quite a number of talks on theory and applications, particularly in areas related to aerodynamics. Achi Brandt ran quite a few workshops during the afternoon breaks.

This proceedings represents the tenth conference in the series. This conference had a passing of the torch. Steve, now at the University of Colorado at Boulder (though he was at the Denver campus for many years), organized his last Copper Mountain multigrid conference. Henceforth, Van Henson and Joel Dendy (both at Department of Energy defense laboratories) will organize the conference. Joel is the only person, other than Steve, to attend all of the Copper Mountain conferences (multigrid or iterative methods).

The talks at this conference included both theory and applications (some things never change). There were two formal workshops on the day before the formal talks began, one by Van Henson on algebraic multigrid methods and the other by Ulrich Rude and Craig Douglas on cache aware iterative methods. Achi Brandt still talks to people during the afternoon breaks, but not as frequently as at the first conference.

The topics in this issue represent a cross section of the topics covered in the conference. These include applying multigrid, multiscale, or multilevel methods to

- error estimation
- eigenvalue problems
- local estimates for algebraic multigrid
- hardware acceleration methods using memory caches
- radiation transport
- the Boltzman equation
- Maxwell's equation
- accelerating a commercial software package
- parallel computing
- parallel computational fluid dynamics
- large eddy simulation
- American style options prediction

The next conference will be held from March 30 to April 4, 2003, once again in Copper Mountain. The snow has already started falling in great abundance for Fall, 2002, as well as any fall in the history of Copper Mountain. This bodes well for an eleventh conference on multigrid methods.

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