Special Issue on Multilevel Methods

This is a special issue of ETNA on multilevel methods for numerical solution of partial differential equations and other complex mathematical problems. The papers here consist of results presented at the Eighth Copper Mountain Conference on Multigrid Methods held April 6–11, 1997, at Copper Mountain Resort in Colorado. There were 60 talks at the meeting, counting special workshop and circus sessions, with about 100 attendees. To quote the MGNet 'Postcard' from Craig Douglas:

"For the first time in years, there were no parallel sessions for talks, giving the conference the type of intimacy found in the GAMM parallel multigrid workshops held in Germany for many years and most recently in Austria. Two years ago there were many newcomers to the Copper Mountain conference. Once again this was the case. In part this is due to the large number of graduate students and fresh Ph.D.'s who have attended both conferences."

The conference series continues to reflect the maturation of the multigrid field. There were many talks on basic theory and algorithms, important practical applications, parallelization, and other computational issues. The papers in this special issue illustrate this evolution, but they also suggested the seemingly endless number of research questions that remain.

Each of the following papers was subjected to a critical refereeing process, upholding the high standards of the ETNA editorial board. We extend our sincerest thanks to following members of our Conference Committee who served as guest editors for this special issue:

Joel Dendy	Los Alamos National Lab
Craig Douglas	University of Kentucky
Van Henson	Lawrence Livermore National Lab
Jim Jones	Lawrence Livermore National Lab
Kirk Jordan	IBM
Duane Melson	NASA Langley Research Center
Seymour Parter	University of Wisconsin
Joseph Pasciak	Texas A & M
John Ruge	University of Colorado at Boulder
Irad Yavneh	Technion

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Steve McCormick and Tom Manteuffel, University of Colorado, Boulder