

Special Volume on Applied Linear Algebra

Linear algebra problems and linear algebra algorithms for their solution are at the very heart of almost all numerical computations and play a prominent role in modern simulation methods in science and engineering. While many problems can be expressed quite simply as linear systems or as eigenvalue problems, they usually exhibit additional structure, which must be exploited in adequate solution methods.

These topics took center stage at the first joint GAMM–SIAM Conference on Applied Linear Algebra held at the University of Düsseldorf, Germany, on 24–27 July 2006. SIAM’s and GAMM’s very active special interest groups on linear algebra organized the Düsseldorf conference as a continuation of SIAM’s successful triannual conference series on Applied Linear Algebra.

Almost 300 participants from more than thirty countries, working in academia, research labs or industry, attended the conference. They presented and discussed their latest results ranging from advances in the theory to the development and analysis of new precise and efficient algorithms to large scale supercomputer applications. The papers of this ETNA volume—which have undergone ETNA’s usual peer review process—illustrate the variety of the subjects treated at the conference and the progress made in the field.

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