
MINISYMPOSIUM 1: Advanced Multigrid Methods for Systems of PDEs

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The main theme of the minisymposium was centered around the construction of advanced multigrid techniques for the solution of large scale linear systems that typically arise from the discretization of systems of PDEs. Examples of such PDEs are found in numerical models used in electromagnetics, flow simulation, and elasticity. In the present proceedings two papers are included; one deals with a multilevel hierarchical basis preconditioner for 3D elliptic problems discretized by the DG (discontinuous Galerkin) method, whereas the second one deals with a new auxiliary space preconditioning method for (semi-)definite time domain Maxwell ($H(\text{curl})$) problems.