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SEMICOARSENING MULTGRID FOR SYSTEMS*

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Abstract. Previously we examined the black box multigrid approach to systems of equations. The approach was a direct extension of the methodology used for scalar equations; that is, interpolation and residual weighting were operator induced, and coarsening employed a Galerkin strategy. The application was to standard coarsening of the unknowns. In this paper we consider a semicoarsening approach and find that there are a few differences in what is generally effective.

Key words. multigrid, parallel computation.

AMS subject classifications. 65N55, 65Y05.

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