
Geoffrey Sanders
**Adaptive Smoothed Aggregation Multigrid for
Non-Symmetric Problems**

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The performance of the adaptive smooth aggregation multigrid (α SA) algorithm suffers for non-symmetric problems. I will present a non-symmetric version of the algorithm that uses kaczmarz iteration as a relaxation step and smoothed aggregation of local right and left singular vectors to form a hierarchy of coarse grid operators. Testing has been done on one and two dimensional convection dominated convection-diffusion. I will present the current results and struggles of these tests. Expect some whining.