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**Parallel Sparse Approximate Inverse Preconditioning with
Neumann Expansion**

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We investigate the use of Neumann expansion in generating sparsity patterns in computing parallel sparse approximate inverse (SAI) preconditioners. This is implemented in the framework of multistep successive sparse approximate inverse preconditioning (MSP) strategies. Numerical experiments with the new sparsity pattern selection strategy are compared with the original MSP strategies. Their advantages and disadvantages are discussed.