

Parallel Preconditioning Techniques for Electromagnetic Problems

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Firstly, we will introduce a PDE (Partial Differential Equation) based preconditioner for solving eddy current problems. Computational results of some large scale simulations with up to 1 billion unknowns and using up to 12280 CPU cores are presented to demonstrate that our preconditioner is robust and scalable. And then the parallel source transfer domain decomposition method will be proposed to solve the scattering problem with high wave number.

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