

A Multi-level Correction Scheme for Eigenvalue Problems

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In this paper, a new type of multi-level correction scheme is proposed for solving eigenvalue problems by finite element method. With this new scheme, the accuracy of eigenpair approximations can be improved after each correction step which only needs to solve a source problem on finer finite element space and an eigenvalue problem on the coarsest finite element space. This correction scheme can improve the efficiency of solving eigenvalue problems by finite element method.

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