数学与系统科学研究院

计算数学所学术报告

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报告题目：

A two-level overlapping Schwarz preconditioner utilizing energy minimizing multiscale finite element basis as a coarse basis

邀请人： 张硕 副研究员

报告时间： 2019 年 8 月 9 日（周五）下午 15:00

报告地点： 科技综合楼三层 311 报告厅

Abstract：

A two-level overlapping Schwarz preconditioner is developed for second order elliptic problems with random and high contrast coefficients. The standard approach often fails for such model problems and it is enriched by coarse basis functions that are obtained from well-designed eigenvalue problems. In my talk, new coarse basis functions are formed by using the idea in a recent work on energy minimizing multiscale finite element methods. The proposed basis is shown to give the resulting preconditioner more robust than those in other approaches. Numerical results are included.

欢迎大家参加！