

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:

Numerical solution of scattering problems by an adaptive DtN finite element method

邀请人: 龚伟 副研究员

报告时间: 2020 年 12 月 4 日 (周五)

下午 15:00-16:00

报告地点: 科技综合楼

311 教室

Abstract:

In this talk, we consider the numerical solution of various scattering problems. The scattering problem is modeled as a boundary value problem over a bounded domain. Based on the Dirichlet-to-Neumann (DtN) operator, a transparent boundary condition is introduced on an artificial circular boundary. An adaptive finite element based on a posterior error estimate is presented to solve the boundary value problem with a nonlocal DtN boundary condition. Numerical experiments are included to compare with the perfectly matched layer (PML) method to illustrate the competitive behavior of the proposed adaptive method.

欢迎大家参加！