

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:

**Error analysis of an HDG method
for a distributed optimal control
problem**

邀请人: 龚伟 博士

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下午 16:00-17:00

报告地点: 科技综合楼三层

311 报告厅

Abstract:

In this talk, we present a priori error analysis of a hybridizable discontinuous Galerkin (HDG) method for a distributed optimal control problem governed by diffusion equations. The error estimates are established based on the projection-based approach recently used to analyze these methods for the diffusion equation. We proved that for approximations of degree k on conforming meshes, the orders of convergence of the approximation to fluxes and scalar variables are $k + 1$ when the local stabilization parameter is suitably chosen. This result is the first stepping stone for devising HDG methods for more general optimal control problems.

欢迎大家参加！