

数学与系统科学研究院

计算数学所学术报告

报告人: **Prof. Weimin Han**

(**Department of Mathematics University
of Iowa Iowa City, IA 52242 USA**)

报告题目: **Discontinuous Galerkin
Methods for Solving the Radiative
Transfer Equation**

邀请人: 崔俊芝院士

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计算数学所报告厅

Abstract:

Discontinuous Galerkin (DG) methods differ from the standard finite element methods in that functions are allowed to be discontinuous across the element boundaries. Advantages of DG methods include ease of using polynomial functions of different order in different elements, more flexibility in mesh refinements, and the locality of the discretization. DG methods have been applied to a wide range of partial differential equations. The radiative transfer equation (RTE) occurs in a wide variety of applications. In this talk, we discuss DG methods for solving the RTE. We introduce the methods, perform consistency and stability analysis, derive error estimates, and present numerical results to show the performance of the methods. The talk is based on recent joint work with Jianguo Huang and Joseph Eichholz.

欢迎大家参加!