

数学与系统科学研究院
计算数学所网络学术报告

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报告题目:

**Discontinuous Galerkin method for
the nonlinear time-dependent
equations**

邀请人: 于海军 研究员

报告时间: 2021 年 12 月 9 日 (周四)

下午 17:30-18:30

报告工具: 腾讯会议 (ID: 203213021)

会议链接:

<https://meeting.tencent.com/dm/99FN6lIh7Ixy>

Abstract:

In this talk, we discuss local discontinuous Galerkin method for solving the nonlinear time-dependent equations which contain nonlinear high order derivatives. The discretization results in an extremely local, element based discretization, which is beneficial for parallel computing and maintaining high order accuracy on unstructured meshes. In particular, the methods are well suited for hp-adaptation, which consists of local mesh refinement and/or the adjustment of the polynomial order in individual elements. The stability and the error estimates of the numerical methods will be discussed. Numerical simulation results for different types of solutions illustrate the accuracy and capability of the methods.

欢迎大家参加！