

数学与系统科学研究院

计算数学所学术报告

报告人: **Associate Prof. Youngju Lee**

(*Department of Mathematics, Texas State University*)

报告题目:

**A locally conservative enriched
Galerkin approximation and their
applications**

邀请人: 张晨松 副研究员

报告时间: **2019年7月31日(周三)**

下午 15:00-16:00

报告地点: 科技综合楼三层

301 报告厅

Abstract:

We present a locally conservative enriched Galerkin finite element method that can be applied for solving parabolic equation as well as Stokes equation in a unified fashion. We present the reason why local conservation is important by establishing continuous and discrete maximum principle of coupled flow and transports. We also present that the resulting system can be solved effectively using a fast solver based on algebraic Multigrid method. Finally, a number of application areas will be presented, which include modeling of Tornado and enhanced Oil recovery.

欢迎大家参加！