

数学与系统科学研究院

计算数学所学术报告

报告人: **Dr. Hui Liu**

(*University of Calgary, Canada*)

报告题目:

Algebraic Multigrid on GPU

邀请人: 崔涛博士

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计算数学所报告厅

Abstract:

In this talk, we will talk about our work on speeding Algebraic Multigrid (AMG) solvers and preconditioners. We implement two AMG solvers and preconditioners, classic AMG and Smoothed Aggregation AMG. Several smoothers, such as damped Jacobi, weighted Jacobi, block Jacobi, Gauss-Seidel, block Gauss-Seidel, domain decomposition and approximate inverse based smoothers, are implemented/developed. All these have GPU version and CPU version. And our GPU AMG solvers and preconditioners are up to 10 times faster than CPU AMG.

欢迎大家参加!