

数学与系统科学研究院

计算数学所学术报告

报告人: **Prof. Yixin Cao**

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报告题目:

**The Storage and Computation of
Large Sparse Matrices: Algorithms
and Complexity**

邀请人: **刘歆 副研究员**

报告时间: **2017 年 7 月 28 日 (周五)**

上午 10:00~11:00

报告地点: **科技综合楼三层**

311 报告厅

Abstract:

Gaussian elimination is a simple technique known to Chinese more than 2200 years ago. When applied to real engineering applications we're dealing with today, however, the old technique may not work well. One particular problem is that large matrices arisen from these applications tend to be sparse, while a naive implementation of Gaussian elimination might accidentally turn too many zeroes into nonzero entries, so-called the fill-in. The problems of storing sparse matrices and minimizing fill-in while performing Gaussian elimination have attracted wide attentions from both mathematicians and computer scientists. We'll survey algorithms and complexity results of these problems.

欢迎大家参加！