

数学与系统科学研究院

计算数学所学术报告

报告人: **Assistant Prof. Xiaojing Ye**

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报告题目:

**Fast Decentralized Gradient Descent
Method**

邀请人: **戴彧虹 研究员**

报告时间: **2015 年 7 月 31 日 (周五)**

下午 16:30-17:30

报告地点: **科技综合楼三层**

311 报告厅

Abstract:

We consider the decentralized consensus optimization problem on a connected network where each node privately holds a part of objective function and data. The goal is to find the minimizer for the whole objective function while each node can only communicate with its neighbors during computations. We present a fast decentralized gradient descent method whose convergence does not require diminishing step sizes as in regular decentralized gradient descent methods, and prove that this new method can reach optimal convergence rate. Numerical experiments also show that it significantly outperforms existing methods. Applications to seismic tomography on large-scale wireless sensor networks will be presented.

欢迎大家参加！