数学与系统科学研究院

计算数学所学术报告

报告人：　**Prof. Ning Hao**

（ *The University of Arizona* ）

报告题目：

A super scalable algorithm for short segment detection

邀请人：　谢和虎 研究员

报告时间：**2019** 年 **6** 月 **10** 日（周一）

下午 **15:00-16:00**

报告地点：　科技综合楼三层

305 会议室

Abstract:

In many applications such as copy number variant detection, the goal is to identify short segments on which the observations have different means or medians from the background. Those segments are usually short and hidden in a long sequence, and hence are very challenging to find. In this talk, we will introduce a super scalable short segment detection algorithm. This nonparametric method clusters the locations where the observations exceed a threshold for segment detection. It is computationally efficient and does not rely on Gaussian noise assumption. Moreover, we propose a framework to assign significance levels for detected segments. We demonstrate the advantages of our proposed method by theoretical, simulation, and real data studies. This talk is based on a work joint with Yue Niu, Feifei Xiao and Heping Zhang.

欢迎大家参加！