数学与系统科学研究院

计算数学所学术报告

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报告题目：

Optimal biological transport networks and a class of eigenvalue optimization problems

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报告时间：2016 年 6 月 28 日（周二）

下午 **15:00~16:00**

报告地点： 科技综合楼三层

301 小报告厅

Abstract：

Biological transport networks, such as blood vessel systems and leaf venation, share a few common properties in structure designing. As a consequence of natural selection, life systems can achieve structure optimization of these networks. I will talk about our models for adaptation and initiation of biological transport networks. The mathematical structure of these models appears to be related to a class of eigenvalue optimization problems. The adaptation dynamics provides an efficient way for such an eigenvalue optimization and an easy way to understand the networks structure. The eigenvalue optimization problems are closely related to that in synchronization and network clustering.

欢迎大家参加！