

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:

**An Optimization Approach for
Modelling Breast Cancer in China**

邀请人: 戴彧虹 研究员

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下午 15:30-16:30

报告地点: 科技综合楼

311 教室

Abstract:

Breast cancer is the most common cancer for Chinese females. As one of the important way of dealing with cancers, screening is shown to be an effective way to diagnose the disease in early stage. To propose efficient screening strategies and evaluate the effect, various approaches are proposed in western countries to modelling the process of breast cancer, which is based on long-term screening data conducted by governments. Software packages are also designed to simulate and analyze the disease. In this talk, we will discuss the challenges of modelling the breast cancer in China and propose an optimization based approach to deal with the parameter estimation so that we can specifically evaluate the screening strategies for domestic breast cancer.

报告人简介:

李庆娜本科（2005）、博士（2010）均毕业于湖南大学，期间作为联合培养博士生访问英国南安普敦大学。2010-2012于中科院数学与系统科学研究院博士后。现任北京理工大学数学与统计学院副教授，博士生导师。曾访问英国南安普顿大学，新加坡国立大学，香港中文大学等。主持国家自然科学基金青年项目一项，面上项目两项。撰写《凸分析讲义》系列教材两部，专著《多维标度方法》等。任中国运筹学会数学优化分会青年理事,北京运筹学会理事。主要研究最优化理论与算法及应用。主要研究工作发表于SIAM J. Optim., IMA J. Numer. Anal., J. Glob. Optim.及Comput. Optim. Appl.等

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