



## 复旦大学数学科学学院 数学综合报告会

报告题目: **An inverse problem for a semilinear parabolic equation arising from cardiac electrophysiology**

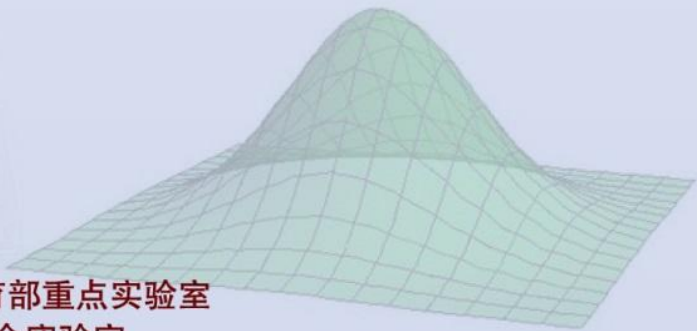
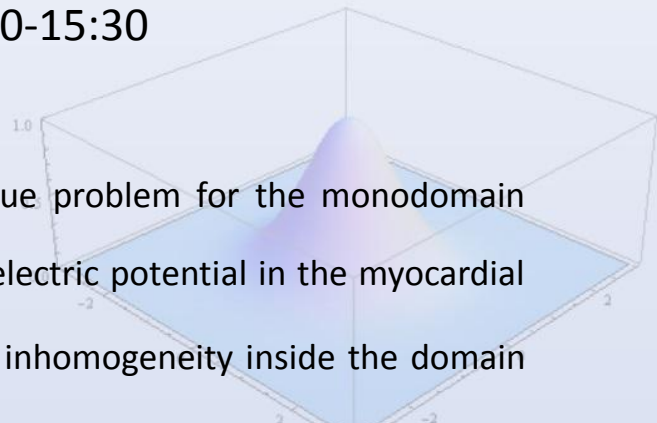
报告人: Prof. Cecilia Cavaterra

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报告时间: 2017-05-31 星期三 14:30-15:30

报告地点: 光华东主楼 1801

摘要: We considered an inverse boundary value problem for the monodomain equation, which describes the evolution of the electric potential in the myocardial tissue. The goal is the determination of a small inhomogeneity inside the domain occupied by the heart from observations of the potential on the boundary. Such a problem is related to the detection of myocardial ischemic regions, characterized by severely reduced blood perfusion and consequent lack of electric conductivity. Both theoretical analysis and numerical reconstruction techniques are developed.



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