## 数学与系统科学研究院 计算数学所学术报告

### <u>报告人</u>: Dr. ZENG Tieyong

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### 报告题目:

### Non-Convex Models in Image Restoration and Segmentation

邀请人: 徐丽 博士

# <u>报告时间</u>: 2013 年 5 月 29 日(周三) 下午 15:30-16:30

## <u>报告地点</u>: 科技综合楼三层 **301** 计算数学所小报告厅

#### Abstract:

In this talk, a new variational model for restoring blurred images with multiplicative noise is proposed. Based on the statistical property of the noise, a quadratic penalty function technique is utilized in order to obtain a strictly convex model under a mild condition, which guarantees the uniqueness of the solution and the stabilization of the algorithm. For solving the new convex variational model, a primal-dual method is proposed and its convergence is studied. The talk ends with a report on numerical tests for the simultaneous deblurring and denoising of images subject to multiplicative noise. A comparison with other methods is provided as well. The idea of convex relaxation is then extended to image segmentation problem.

欢迎大家参加!