

数学与系统科学研究院

计算数学所学术报告

报告人: **Prof. Yu-Mei Huang**

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报告题目:

**Total Variation methods for
Multiplicative Noise Image
Restoration**

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报告时间: **2013 年 4 月 17 日 (周三)**

上午 10:00-11:00

报告地点: **科技综合楼三层 311**

计算数学所报告厅

Abstract:

Multiplicative noise removal problems have attracted much attention in recent years. Unlike additive noise removal problems, the presence of multiplicative noise to an image is in a way by multiplying itself to the original image, so almost all information of the original image may disappear in the observed image. In this talk, we will present a strictly convex objective function for pure multiplicative noise removal problems and a two-step method for removing both the blur and multiplicative noise, both methods incorporate the modified total variation regularization in the objective function to recover image edges. We develop an alternating minimization algorithm to find the minimizer of such objective function efficiently, and also show the convergence of the minimizing method. Our experimental results show that the quality of denoised images by the proposed method is quite well.

欢迎大家参加!