数学与系统科学研究院

计算数学所学术报告

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<u>报告题目</u>:

Review of Some Important Regularization Terms for solving Mathematical Image Problems

<u>邀请人</u>: 洪佳林研究员 <u>报告时间</u>: 2018 年 3 月 23 日 (周五) 上午 10:00--11:00 <u>报告地点</u>: 数学院南楼N902 教室

报告摘要:

In this talk some efficient regularization term functions will be introduced. These functions are a part of general inverse problems, especially in mathematical models for image processing. The argument is around responding to the following questions:

- 1- What is the mathematical image problem?
- 2- How a mathematical image problem can be formulated?
- **3-** What is the analytical definition of TV (Total variation) as a regularization function?
- 4- What is the application of TV and TGV (Total generalized variation) in mathematical image problems?
- 5- How a regularization term can be defined for a special image processing problem?
- 6- How we can compare regularization function for applied image problems?
- 7- What are the promising future research subjects?

<u>Keywords:</u> Mathematical image problems, Total variation, Regularization term, Denoising, Upscaling.

欢迎大家参加!