

# 数学与系统科学研究院

## 计算数学所学术报告

报告人: **Prof. Shidong Li**

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报告题目:

**On analysis approaches in  
compressed sensing with coherent  
frames**

邀请人: 许志强 研究员

报告时间: 2014 年 11 月 25 日 (周二)

上午 10:00

报告地点: 数学院南楼二层 210  
会议室

## **Abstract:**

When signals are sparse with respect to a coherent frame, the associated compressed sensing problem becomes much more complicated. Conventional and new analysis approaches for solving such compressed sensing problems will be discussed. Particular attention will be on our new approaches of alternative dual-frame based  $\ell_1$  analysis methods, and their performance estimations. A notion of of sparsity-inducing dual frames (sparse duals) will be introduced. Basic properties of sparse duals, and the sparse-dual-based  $\ell_1$ -analysis approach and its performance analysis will be major parts of this presentation. Examples will be provided. Most of the presentation is based on the joint work with Tiebin Mi.

**欢迎大家参加！**