



Date

July 5-6, 2015

Place

Xidian University
Xi'an, P.R. China

Free Registration

Workshop Organizers:

Xiang-Gen Xia

University of Delaware

Zhi-Quan Luo

University of Minnesota, CUHK(SZ)

Hongwei Liu

Xidian University

Jiandong Li

Xidian University

Ming Jiang

Peking University

Yu-Guang Shi

Peking University

Yu-Hong Dai

Chinese Academy of Sciences

Jian-Guo Huang

Northwestern Polytechnic University

Kehu Yang

Xidian University

Local Organizers:

Yuan-Yuan Zuo, Xidian University

Hongxin Tian, Xidian University

Lin-Rang Zhang, Xidian University

Bo Chen, Xidian University

Qing Xu, Xidian University

Sponsors



National Lab of Radar Signal Processing, Xidian University



Collaborative Innovation Center of Information Sensing and Understanding



Network laboratory.CETC20



State Key Laboratory of Integrated Services Network



Major Project "Key Mathematical Issues in Information processing", NSFC



Center for Optimization and Applications, CAS

In recent years there has been a surge of research in the interfaces between mathematical optimization, statistics, information theory, data mining, signal processing and wireless communication, leading to new powerful mathematical techniques as well as efficient algorithms for important applications in information sciences. The interplay between the information sciences and the applied mathematics communities has been greatly beneficial to both sides: modern optimization and statistics have significantly broadened the class of information science problems considered solvable, while applications in data mining, signal processing and communications provide great impetus for new algorithmic tools and analysis in statistics and optimization. The goal of this workshop is twofold: (1) to feature recent advances in the field and highlight emerging challenges and applications, and (2) to invite some speakers from industry to illustrate the impact of technology in information sciences. The workshop will bring together leading researchers in signal processing, communications and optimization from academia, industry and government, and will showcase recent new results on algorithmic methods and complexity analysis in diverse areas such as estimation and detection theory, MIMO radar, interference management, image/speech processing, beamforming and array processing, communication systems and networks, and so on.

Single Track Speakers (July 5-6, 2015, in alphabetical order by surname)

- ◆ **Tony Cai, University of Pennsylvania**
Recovery of High-Dimensional Low-Rank Matrices
- ◆ **Guoliang Fan, Oklahoma State University**
Point Set Registration Approaches to Human Pose Estimation: A Two-perspective Study
- ◆ **Fulvio Gini, University of Pisa, Italy**
Modeling and Mismatching in Adaptive Radar Detection – Parameter Bounds Under Misspecified Models
- ◆ **Zhu Han, University of Houston**
Case Study of Big Data Analysis for Smart Grid
- ◆ **Yingbo Hua, University of California at Riverside**
Blind Digital Tuning – a Digital Method for an Analog World
- ◆ **Ron Kimmel, Technion - Israel Institute of Technology**
A Spectral Perspective on Shape Analysis
- ◆ **Zhiquan Luo, University of Minnesota, CUHK(SZ)**
Guaranteed Matrix Completion via Non-convex Factorization
- ◆ **Jonathan Manton, University of Melbourne**
Optimisation on Manifolds, and Optimisation Geometry
- ◆ **Isao Yamada, Tokyo Institute of Technology**
Two Spices of Convex Optimization for Certain Inverse Problems
- ◆ **Xiao-Ping Zhang, Ryerson University**
Signal Processing for Finance, Economics and Marketing
- ◆ **Yimin Zhang, Villanova University**
Time-Frequency Analysis and Array Processing for Nonstationary Signals

Contact us

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Workshop Website: <http://www.miis2015.org/>

Space is limited, go to the workshop website and learn more now!!!

Sunday, July 5, 2015

Place	Building J-112, Main Campus of Xidian University
Opening Session	8:30 – 9:00
Session Chair	Hongwei Liu, Xidian University, China
Opening Speech	Yintang Yang, Vice President of Xidian University, China
Session 1	
Session Chair	Xianggen Xia, University of Delaware, USA
9:00 – 10:00	Tony Cai, University of Pennsylvania Recovery of High-Dimensional Low-Rank Matrices
10:00 – 11:00	Yingbo Hua, University of California at Riverside Blind Digital Tuning – a Digital Method for an Analog World
11:00 – 11:15	Coffee Break
11:15 – 12:15	Guoliang Fan, Oklahoma State University Point Set Registration Approaches to Human Pose Estimation: A Two-perspective Study
Session 2	
Session Chair	Guoliang Fan, Oklahoma State University
14:30 – 15:30	Isao Yamada, Tokyo Institute of Technology Two Spices of Convex Optimization for Certain Inverse Problems
15:30 – 16:30	Jonathan Manton, University of Melbourne Optimization on Manifolds, and Optimization Geometry
16:30 – 16:45	Coffee Break
16:45 – 17:45	Zhiquan Luo, University of Minnesota, CUHK(SZ) Guaranteed Matrix Completion via Non-convex Factorization

Monday, July 6, 2015

Place	Building J-112, Main Campus of Xidian University
Session 3	
Session Chair	Zhiquan Luo, University of Minnesota, CUHK(SZ)
8:30 – 9:30	Xiao-Ping (Steven) Zhang, Ryerson University Signal Processing for Finance, Economics and Marketing
9:30 – 10:30	Yimin Zhang, Villanova University Nonstationary Signal Analysis and Array Processing
10:30 – 11:00	Coffee Break
11:00 – 12:00	Fulvio Gini, University of Pisa Modeling and Mismodeling in Adaptive Radar Detection – Parameter Bounds under Misspecified Models
12:00 – 14:30	Lunch Break
Session 4	
Session Chair	Bo Chen, Xidian University, China
14:30 – 15:30	Ron Kimmel, Technion - Israel Institute of Technology A Spectral Perspective on Shape Analysis
15:30 – 16:30	Zhu Han, University of Houston Case Study of Big Data Analysis for Smart Grid
16:30 – 17:00	Coffee Break
17:00 – 18:00	Panel on Big Data in Different Fields
Panel Chair	Zhiquan Luo, University of Minnesota, CUHK(SZ)
Panelists	Guoliang Fan, Yingbo Hua, Isao Yamada, Jonathan Manton, Yimin Zhang, Fulvio Gini, Xiao-Ping Zhang, Ron Kimmel
