### COMPLETED as of May 14, 2012

# Plenary Sessions

Peter Hall

Title: Methodology and theory for partial least squares applied to functional data

Chair: Byeong U. Park, Seoul National University, Korea

S.R.S. Varadhan

Title: Large deviations-some unusual examples

Chair: Tadahisa Funaki, University of Tokyo, Japan

### Distinguished Lecture Sessions

### DL01.

Sponsor: IMS

Session title: Nonparametric Econometrics

Chair: Ingrid van Keilegom, Universite Catholique de Louvain, Belgium

DL speaker: Enno Mammen, Universitaet Mannheim, Germany

Title: Asymptotics for GARCH-in-Mean models with application to semiparametric specification testing.

Invited speakers:

1. Yoon-Jae Whang, Seoul National University, Korea

Title: Testing Functional Inequalities 2. Xiaohong Chen, Yale University, USA

Title: Sieve Inference for Weakly Dependent Data

## DL03.

Sponsor: IMS

Session title: Statistical Inference with Large Covariance Matrices

Chair: Runze Li, Penn State University, USA

DL speaker: Tony Cai, University of Pennsylvania, USA

Title: Adaptive Estimation of Large Covariance Matrices

Invited speakers:

1. Harrison Zhou, Yale University, USA

Title: Minimax Lower Bounds in Covariance Matrices Estimation

2. Ming Yuan, Georgia Institute of Technology, USA

Title: High Dimensional Covariance Matrix Estimation with Group Structures

### DL04.

Sponsor: IMS

Session title: Functional Data Analysis

Chair: Ming-Yen Cheng, National Taiwan University, Taiwan

DL speaker: Jane-Ling Wang, University of California at Davis, USA

Title: Dimension reduction for functional data

Invited speakers:

1. Byeong U. Park, Seoul National University, Korea

Title: Smooth backfitting: Additive models for longitudinal data

2. Graciela Boente, University of Bueno Aires, Argentina

Title: Robust estimators under a functional common principal components model

### DL05.

Sponsor: IMS

Session title: Expanding the MCMC Kingdom on All Fronts: Theory, Methods, and

**Applications** 

Chair: Jaeyong Lee, Seoul National University, Korea

DL speaker: Art Owen, Stanford University, USA

Title: Quasi-Monte Carlo for Markov chain Monte Carlo

Invited speakers:

1. Yasuhiro Omori, University of Tokyo, Japan

Title: Realized stochastic volatility models and their applications using high frequency financial time series

2. Hani Doss, University of Florida, USA

Title: Hyperparameter and Model Selection for Nonparametric Bayes Problems via Radon-Nikodym Derivatives

#### DL06.

Sponsor: Korea/KSS

Session title: Bayesian Nonparametrics for Complex Models

Chair: Yoon Kyung Lee, Ohio State University, USA

DL speaker: Yongdai Kim, Seoul National University, Korea

Title: Bayesian bootstrap for survival analysis

### Invited speakers:

1. Lancelot James, Hong Kong University of Science and Technology, Hong Kong

Title: hierarchical neutral to the right processes

2. Taeryon Choi, Korea University, Korea

Title: Remarks on consistency of Bayesian regression problems

### DL07.

Sponsor: Japan/JSS

Session title: Statistical Estimation of Portfolios Chair: Hiroshi Shiraishi, Jikei Medical University

DL speaker: Masanobu Taniguchi, Waseda University, Japan

Title: Optimal statistical estimation of portfolios for non-Gaussian dependent returns

#### Discussants:

1. Valentin Patilea, INSA Rennes, France

Title: Discussion of the Distinguished Lecture ``Statistical Estimation of Optimal Portfolios for Dependent Returns" by Masanobu Taniguchi

2. Alexandle Petkovic, Waseda University, Japan

Title: Portfolio Estimation: Discussion

### DL08.

Sponsor: Japan/JSS

Session title: Predictive Inference and Information Geometry

Chair: Yuzo Maruyama, University of Tokyo, Japan

DL speaker: Fumiyasu Komaki, University of Tokyo, Japan

Title: Bayesian inference from a predictive perspective

### Invited speakers:

1. Edward I. George, University of Pennsylvania, USA

Title: Nonparametric Bayes Predictive Density Estimation

2. Shinto Eguchi, Institute of Statistical Mathematics, Japan

Title: Information geometry in statistics

### DL09.

Sponsor: Japan/ISM

Session title: Statistical Methods with Positive Definite Kernels

Chair: Yutaka Kano, Osaka University, Japan

DL speaker: Kenji Fukumizu, Institute of Statistical Mathematics, Japan

Title: Nonparametric inference with positive definite kernels

#### Discussants:

1. Arthur Gretton, University College London, UK

Title: Kernel Methods for Distribution Comparison: Theory and Applications

2. Su-Yun Huang, Academia Sinica, Taiwan

Title: Robust non-convex support vector machines

## DL10.

Sponsor: China

Session title: Causal Inference and Model Selection

Chair: Dayue Chen, Peking University, China

DL speaker: Geng Zhi, Peking University, China

Title: Causal inference and learning along paths

# Invited speakers:

1. Liugen Xue, Beijing University of Technology, China

Title: Statistical inference for single-index models with missing response at random

2. Heng-Jian Cui, Peking Normal University, China

Title: ROBUST ESTIMATION FOR PARTIALLY LINEAR MODELS WITH

### DL11.

Sponsor: Taiwan

Session title: High-Dimensional and Functional Data Analysis Chair: Shu-Hui Chang, National Taiwan University, Taiwan

DL Speaker: Ker-Chau Li, Academia Sinica, Taiwan

Title: Statistical issues arising from large scale genomic data exploration:

Nonlinearity, high dimensionality and complex interaction

# Invited Speakers:

1. Naisyin Wang, University of Michigan

Title: Parameter Estimation for Ordinary Differential Equations: An Alternative View on Penalty

2. Hans-Georg Müller, University of California at Davis, USA

Title: Functional data analysis for volatility

### DL12.

Sponsor: Singapore

Session title: Recent Advances on High-dimensional Data Analysis Chair: Jin-Ting Zhang, National University of Singapore, Singapore

DL speaker: Jianqing Fan, Princeton University, USA

Title: A ROAD to Nonparametric Classification

Invited Speakers:

1. Gareth James, University of South California, USA

Title: Constrained Lasso Optimization

### DL13.

Sponsor: India

Session title: Random Matrix Theory

Chair: Jack Silverstein, North Carolina State University, USA

DL speaker: Arup Bose, Indian Statistical Institute, India

Title: Limiting spectral distribution of patterned random matrices

Invited Speakers:

1. Steven Miller, Williams College, USA

Title: Distributions of Eigenvalues of Real Symmetric m-Circulant Matrices

2. Arnab Sen, University of Cambridge, UK

Title: Random Toeplitz matrices

### DL14.

Sponsor: ICSA

Session title: Quantitative Methods for Stratified (Personalized) Medicine

Chair: Xihong Lin, Harvard University, USA

DL speaker: Lee-Jen Wei, Harvard University, USA

Title: EFFECTIVELY SELECTING A TARGET POPULATION FOR A FUTURE COMPARATIVE STUDY

Invited speakers:

1. Lu Tian, Stanford University, USA

Title: Modified Covariate Approach for Personalized Medicine

2. Bibhas Chakraborty, Columbia University, USA

Title: Inference for optimal dynamic treatment regimes using an adaptive m-out-of-

### n bootstrap scheme

### DL15.

Sponsor: IISA

Session title: Bayesian Nonparametrics

Chair: Lanslot James, Hong Kong University of Science and Technology, Hong Kong

DL speaker: J. K. Ghosh, Purdue University, USA

Title: Bayesian Nonparametrics - A Survey of New Priors, Consistency Issues in Estimation and Testing, Applications to Clustering

# Invited speakers:

1. Judith Rousseau, Université Paris Dauphine, France.

Title: On some asymptotic features of semi-parametric Bayesian models

2. Jaeyong Lee, Seoul National University, Korea.

Title: Posterior Consistency of Species Sampling Priors

### DL16.

Sponsor: Australia and New Zealand

Session title: Spatial Point Processes

Chair: Estate Khmaladze, Victoria University of Wellington, New Zealand

DL speaker: Adrian Baddeley, University of Western Australia, Australia

Title: Residuals, diagnostics and score tests for spatial point processes

# Invited speakers:

1. Yosihiko Ogata, Institute of Statistical Mathematics, Japan

Title: Residual analysis in statistical seismology and discovering seismicity anomalies

2. Laurent Cavalier, Université Aix-Marseille 1, France

Title: Inverse problems in econometrics.

### DL17.

Sponsor: Hong Kong

Session title: What Next in Time Series?

Chair: Shiqing Ling, Hong Kong University of Science and Technology, Hong Kong

DL speaker: Wai Keung Li, University of Hong Kong, Hong Kong

Title: Some New Threshold Type Models

### Invited speakers:

1. Noelle Samia, Northwestern University, USA

Title: Bayesian inference of panels of threshold autoregressive time series

2. Rong Chen, Rutgers University, USA

Title: Dynamic Modeling and Prediction of Risk Neutral Densities