



TOHOKU
UNIVERSITY

Tohoku Forum for Creativity | Program 2014

Challenges for Big Data in our Society : Statistical Analysis of Large
Scale, High Dimensional Data for Socio-Economic Problems

International Conference on Statistical Analysis of Large Scale High Dimensional Socio-Economics Data

2014
11/6 Thu. - **7** Fri.

Large Conference Room, 11F, Graduate School of Education
Kawauchi South Campus, Tohoku University

27-1 Kawauchi, Aoba-ku, Sendai, 980-8576, JAPAN

Invited Researchers

Takeaki KARIYA (Meiji University)
Yoshinori KAWASAKI (The Institute of Statistical Mathematics)
Atsuyuki KOGURE (Keio University)
Greg ALLENBY (Ohio State University)
Michael TRUSOV (University of Maryland)
George TIAO (University of Chicago)
Tomoyuki HIGUCHI (The Institute of Statistical Mathematics)

Dominique M. HANSENS (UCLA)
Jaehwan KIM (Korea University)
Yusuke KUMAGAE (NTT Corporation)
Piotr FRYZLEWICZ (LSE)
Daniel NORDMAN (Iowa State University)
Yoshihiro YAJIMA (University of Tokyo)

For registration and more details :

http://www.tfc.tohoku.ac.jp/event/2014big_ic.html

Registration Deadline : **Fri. October 31, 2014**

Cosponsor : **JSPS KAKENHI Grant Number (A)25245054**

Organizers : **Nobuhiko TERUI** (Graduate School of Economics and Management, Tohoku University)

Yasumasa MATSUDA (Graduate School of Economics and Management, Tohoku University)



TOHOKU FORUM
for CREATIVITY

www.tfc.tohoku.ac.jp

Supported by



TOKYO ELECTRON

International Conference on Statistical Analysis of Large Scale High Dimensional Socio-Economics Data

Large Conference Room, 11F, Graduate School of Education, Kawauchi South Campus, Tohoku University
27-1 Kawauchi, Aoba-ku, Sendai, 980-8576, JAPAN

11/6 Thu.

Opening Address

10:15 - 10:30 **Nobuhiko TERUI** (Tohoku University)

Finance Chair : **Yoshihiko TSUKUDA** (Tohoku University)

10:30 - 11:00 **Takeaki KARIYA** (Meiji University)

"An Efficiency of a GLSE in Regression Model with AR Errors and Its Application to Kariya's Bond Pricing Model"

11:00 - 11:30 **Hongwei CHUANG** (Tohoku University)

"Time Series Residual Momentum and Momentum Crash"

11:30 - 12:00 **Yoshinori KAWASAKI** (The Institute of Statistical Mathematics)

"Predictive Modeling in Socio-Economic Data Using Smooth-Thresholding"

Lunch

13:30 - 14:00 **Atsuyuki KOGURE** (Keio University)

"A Bayesian Approach to Longevity Derivative Pricing under Stochastic Interest Rates with a Two-Factor Lee-Carter Model"

14:00 - 14:30 **Ryoza MIURA** (Tohoku University)

"R-Estimators for Generalized Lehmann's Alternative Models When Observations are a Weakly Dependent Sequence: The Cases of Residuals in a Linear Regression"

Coffee Break

Marketing I Chair : **Hajime WAGO** (The Institute of Statistical Research)

14:45 - 15:15 **Greg ALLENBY** (Ohio State University)

"Latent Topic Modeling of Consumer Reviews: Linking Text Evaluations to Customer Satisfaction and Brands"

15:15 - 15:45 **Jaehwan KIM** (Korea University)

"A Direct Utility Model for Economies of Scope"

Coffee Break

Keynote Lecture Chair : **Nobuhiko TERUI** (Tohoku University)

16:00 - 16:50 **George TIAO** (University of Chicago)

"Panel Data Analyses, Bayesian Approach and Forecasting"

17:00 - 17:50 **Tomoyuki HIGUCHI** (The Institute of Statistical Mathematics)

"Big data and Personalization technology: Imputation, Linkage, and Stream Computing"

Reception

18:00 - Café REPOS (文系喫茶ルポ一)

11/7 Fri.

Marketing II Chair : **Takuya SATOMURA** (Keio University)

10:00 - 10:30 **Dominique M. HANSENS** (UCLA)

"Performance Growth and Vigilant Marketing Spending"

10:30 - 11:00 **Michael TRUSOV** (University of Maryland)

"Crumbs of The Cookie: User Profiling in Customer-Base Analysis and Behavioral Targeting"

Coffee Break

11:15 - 11:45 **Yusuke KUMAGAE** (NTT Corporation)

"View and Purchase: Purchase Behavior Analysis via Topic Model"

11:45 - 12:15 **Tsukasa ISHIGAKI** (Tohoku University)

"A Dynamic Marketing Model Based on Topic Modeling for Large-Scale Customer Data"

Lunch

Economic Time Series Chair : **Seisho SATO** (University of Tokyo)

13:30 - 14:00 **Piotr FRYZLEWICZ** (LSE)

"The Use of Randomness in Time Series Analysis"

14:00 - 14:30 **Daniel NORDMAN** (Iowa State University)

"A Frequency Domain Empirical Likelihood for Irregularly Spaced Dependent Data"

Coffee Break

14:45 - 15:15 **Yoshihiro YAJIMA** (University of Tokyo)

"On Statistical Testing for Spatio-Temporal Stationary Random Fields"

15:15 - 15:45 **Yasumasa MATSUDA** (Tohoku University)

"Wavelet Analysis of Land Price Data in Tokyo"

Concluding Address

15:45 - 16:00 **Yasumasa MATSUDA** (Tohoku University)