

"Applications of Data Science in Social Science"

on Feb. 17-18th, 2022

Symposium in honor of Prof. Nobuhiko Terui

supported by JSPS KAKENHI

基盤研究(A)20H00576 「大規模複雑データの理論と方法論の革新的展開」

研究代表者：青嶋誠（筑波大学）

基盤研究(B)21H03400 「大規模時空間データモデル構築と社会科学における実証研究への応用」

研究代表者：松田安昌（東北大学）

東北大学大学院経済学研究科サービス・データ科学研究センター

Feb 17, 2022

9:30-11:00 【Session 1】 Chair: **Masataka Ban** (University of Tsukuba)

・ **Sotaro Katsumata** (Osaka University)

Online Review Text Analysis Incorporating Valence and Vote: Extending the Topic Model to Include Performance Measures

・ **Mirai Igarashi** (University of Tsukuba)

Finding Influential Users by Topic in Unstructured User-generated Content

・ **Hiroshi Onishi** (Tokyo University of Science)

Does Deregulation of Health Claims on Functional Food Package Design Change Consumers' Purchase Behaviors?

11:10-12:10 【Session 2】 Chair: **Shohei Hasegawa** (Hosei University)

・ **Junji Nakano** (Chuo University)

Statistical model for article citation network in Web of Science

・ **Manabu Asai** (Soka University)

High-Dimensional VAR Models via Sparse Precision Matrix

Lunch 12:10-13:10

13:10-14:10 【Session 3】 Chair: **Wirawan Dony Dahana** (Osaka University)

・ **Naoto Kunitomo** (The Institute of Statistical Mathematics)

Local SIML Estimation of Some Brownian and Jump Functionals under Market Microstructure Noise

• **Nobuaki Hoshino** (Kanazawa University)

ビッグマイクロデータのプライバシー保護

14:20-15:20 【Session 4】 Chair: **Tsukasa Ishigaki** (Tohoku University)

• **Takemi Yanagimoto** (The Institute of Statistical Mathematics)

無情報事前分布の理解：公平な分配と未知母数から

• **Hiroshi Itosu** (Tokyo University of Science)

パラメータ識別可能なグラフィカルモデルによる欠測を含んだ $2 \times 2$ 分割表の対称性の検定

15:30-16:30 【Session 5】 Chair: **Yasumasa Matsuda** (Tohoku University)

• **Makoto Abe** (The University of Tokyo)

Deriving Lifetime Value of a Customer Who Exhibits Non-Poisson Purchase Behavior:  
Application to Marketing Intervention for Customer Retention

• **Thomas Otter** (Goethe University)

Discrete Choice in Marketing through the Lens of Rational Inattention

16:40-17:40 【Session 6】 Chair: **Wirawan Dony Dahana** (Osaka University)

• **Nobuhiko Terui** (Tohoku University)

Service Economy and Data Science

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9:30-11:00 【Session 7】 Chair: **Shohei Hasegawa** (Hosei University)

• **Greg Allenby** (Ohio State University)

A Choice Model of Utility Maximization and Regret Minimization

• **Jaehwan Kim** (Korea University)

The Impact of Gig Economy on the Product Quality through the Labor Market: Evidence  
from Ride-sharing and Restaurant Quality

• **Takuya Satomura** (Keio University)

A Multiple Duration Choice Model for Service Data

11:10-12:10 【Session 8】 Chair: **Masataka Ban** (University of Tsukuba)

• **Yoshimasa Uematsu** (Tohoku University)

Robust False Discovery Rate Control via Debiased Rank Lasso

• **Junichi Hirukawa** (Niigata University)

Innovation algorithm of fractionally integrated ( $I(d)$ ) process and applications on the estimation of parameters

Lunch 12:10-13:10

13:10-14:10 【Session 9】 Chair: **Tsukasa Ishigaki** (Tohoku University)

- **Qingfeng Liu** (Otaru University of Commerce)

Machine Collaboration

- **Takaki Sato** (Tohoku University)

コロナ禍における感染拡大防止対策の人流抑制効果に関する実証分析

14:20-15:20 【Session 10】 Chair: **Yasumasa Matsuda** (Tohoku University)

- **Masataka Ban** (University of Tsukuba)

購入型クラウドファンディングの資金調達パターン分析

- **Shohei Hasegawa** (Hosei University)

BTYD モデルによる Q&A サイトの投稿行動の分析

15:30-16:30 【Session 11】 Chair: **Wirawan Dony Dahana** (Osaka University)

- **Li Yinxing** (Tohoku University)

Product Embedding For The Large-scale Disaggregated Sales Data

- **Shogo Takedomi** (Tohoku University, BRIDGESTONE)

待ち時間予測モデルを利用した pMP モデリングによる緊急ロードサービス施設配置最適化