

February, 22, 2017

## **International Workshop on Dynamic Risk Management of Transport Network**

--- Social Interaction, Monitoring and Simulation ---

Dates: March 4<sup>th</sup> - 5<sup>th</sup>

Venue: Tokyo Institute of Technology, Midorigaoka Build #6 (Midorigaoka Hall)

<http://www.titech.ac.jp/english/maps/ookayama/midorigaoka.html>

Organizers: Masao Kuwahara (Tohoku U.), Yasuo Asakura (Tokyo Tech.), Eiji Hato (U. of Tokyo), Toshiyuki Yamamoto (Nagoya U.), Takamasa Iryo (Kobe U.), Daisuke Fukuda (Tokyo Tech)

### **March 4<sup>th</sup>**

13:00 - Opening Session

13:30 - 14:50

(1) The Analysis of Transport Network Vulnerability by Spectral Partitioning

Mike G.H. Bell, University of Sydney Business School (Australia)

(2) Using GPS Data for Transport Network Safety and Demand Analysis: Case Study of Smart Taxi system and National GPS Data

Agachai Sumalee, The Hong Kong Polytechnic University (Hong Kong)

15:10 - 16:30

(3) Tracking the Evolution of Infrastructure Systems and Mass Responses Using Publically Available Data-Insights from Hurricane Sandy

Cynthia Chen, University of Washington (USA)

(4) Evacuation Management and Activity-Based Models

Harry J.P. Timmermans, Eindhoven University of Technology (Netherlands)

16:50 - 18:10

(5) Application of High Performance Computing to Multi-Agent System of Mass Evacuation

Muneo Hori, U. of Tokyo (Japan)

(6) Dynamical Money Transport on One Million Business Transaction Network

Misako Takayasu, Tokyo Tech. (Japan)

### **March 5<sup>th</sup>**

13:00 - 14:40

(7) Modeling Interactions under Imperfect Information

Matthieu Cochon de Lapparent, Ecole Polytechnique Fédérale de Lausanne (Switzerland)

(8) Optimal Parking Provision for Ride-sourcing Services

Yafeng Yin, University of Michigan (USA)

(9) A Macroscopic Approach for Modeling and Optimizing Multimodal Traffic in Urban Networks  
Nan Zheng, Beihang University (China)

(10) Incorporating GPS and IOT Platforms to Manage Variation of Cargo Demand in a Public Truck Terminal Network  
Jaruwit Prabnasak, King Mongkut's Institute of Technology Ladkrabang (Thailand)

15:00 - 17:00

(11) Departure Time Choice Equilibrium Problem with Partial Implementation of Congestion Pricing  
Katsuya Sakai, Tokyo Tech.

(12) Sampling Origin-Destination Matrices for Unobserved Network using MCMC methods  
Junji Urata, Kobe University

(13) Nonstationary Distribution of Pedestrian Arrival Based on Disaggregated Traffic Counts  
Wataru Nakanishi, Tokyo Tech.

(14) Endogenous Market Penetration Dynamics of Automated and Connected Vehicles: Basic Model and a Paradox  
Toru Seo, Tokyo Tech.

(15) Mechanism Design for Car Sharing and Real-time Ridesharing  
Yusuke Hara, University of Tokyo

17:00 - Closing