

Workshop IV: Decision Support for Traffic

Monday November 16, 2015

- 8:00–8:55 *Check-In/Light Breakfast (Hosted by IPAM)*
- 8:55–9:00 *Welcome & Opening Remarks: Dean Miguel García-Garibay (Dean of Physical Sciences, UCLA) and Dima Shlyakhtenko (Director, IPAM)*
- 9:00–9:50 **Michel Bierlaire** (École Polytechnique Fédérale de Lausanne (EPFL))
Integrated demand and supply optimization
- 10:00–10:15 *Break*
- 10:15–11:05 **Stanley Young** (National Renewable Energy Laboratory)
The convergence of vehicle and infrastructure data for traffic and demand management
- 11:15–11:30 *Break*
- 11:30–12:20 **Elise Miller Hooks** (National Science Foundation)
A Real Options Approach to Managing Travel Time Uncertainty in Vehicle Routing
- 12:30–2:30 *Lunch (on your own)*
- 2:30–3:20 **Serge Hoogendoorn** (Technische Universiteit te Delft)
Field Operational Test Integrated Network Management in Amsterdam: lessons learnt from putting 20 years of research experience to practice
- 3:30–4:00 *Break*
- 4:00–4:50 **Alexandre Bayen** (University of California, Berkeley (UC Berkeley))
ZUbers against ZLyfts Apocalypse: An Analysis Framework for DoS Attacks on Mobility-as-a-Service Systems
- 5:00–6:30 *Poster Session & Reception (Hosted by IPAM)*

Tuesday November 17, 2015

- 8:00–9:00 *Breakfast (Hosted by IPAM)*
- 9:00–9:50 **Marco Pavone** (Stanford University)
Models, Algorithms, and Evaluation for Autonomous Mobility-On-Demand Systems
- 10:00–10:15 *Break*
- 10:15–11:05 **Robert Bertini** (California Polytechnic State University)
Multimodal Transportation System Simulation Manual (TSSM) Framework: From Theory to Practice
- 11:15–11:30 *Break*

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- 11:30–12:20 **Ardalan Vahidi** (Clemson University)
Driver Decision Support For Improving Energy Efficiency of Connected Cars and The Impact on Arterial Traffic
- 12:30–2:30 *Lunch (on your own)*
- 2:30–3:20 **Francisco Pereira** (Technical University of Denmark)
Non-recurrent events in traffic prediction
- 3:30–4:00 *Break*
- 4:00–4:50 **Travis Waller** (University of New South Wales)
Novel Network Equilibrium Models for Traffic Management and Planning

Wednesday November 18, 2015

- 8:00–9:00 *Breakfast (Hosted by IPAM)*
- 9:00–9:50 **Jeff Shamma** (King Abdullah Univ. of Science and Technology (KAUST))
Game theoretic learning and social influence
- 10:00–10:15 *Break*
- 10:15–11:05 **Walid Krichene** (University of California, Berkeley (UC Berkeley))
Distributed learning in routing games: convergence, estimation of player dynamics, and control.
- 11:15–11:30 *Break*
- 11:30–12:20 **Carolina Osorio** (Massachusetts Institute of Technology)
On the use of high-resolution urban traffic simulation models for large-scale network optimization
- 12:30–2:30 *Lunch (on your own)*
- 2:30–3:20 **Matthew Barth** (University of California, Riverside (UC Riverside))
Advanced Traffic Management on Arterial Corridors with Connected and Automated Vehicles
- 3:30–4:00 *Break*
- 4:00–4:50 **Marta Gonzalez** (Massachusetts Institute of Technology)
Big data to tackle Urban Mobility Challenges

Thursday November 19, 2015

- 8:00–9:00 *Breakfast (Hosted by IPAM)*
- 9:00–9:50 **Marco Nie** (Northwestern University)
Why License Plate Rationing Does Not Work and How to Fix It?
- 10:00–10:15 *Break*

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- 10:15–11:05 **Matthew Jukes** (Aimsun)
A real-time simulation-based decision support system for traffic management: the San Diego I-15 ICM model
- 11:15–11:30 *Break*
- 11:30–12:20 **Gary Ritter** (U.S. Department of Transportation, Ret.)
Traffic Decision Support: Aspirations and Practical Challenges
- 12:30–2:30 *Lunch (on your own)*
- 2:30–3:20 **Guido Gentile** (Sapienza University of Rome)
Real-time traffic forecast by means of macroscopic models for Dynamic Traffic Assignment: theory and practice
- 3:30–4:00 *Break*
- 4:00–4:50 **Jane Macfarlane** (NAVTEQ)
Next-Generation Location Services: ADAS and Beyond

Friday November 20, 2015

- 8:00–9:00 *Breakfast (Hosted by IPAM)*
- 9:00–9:50 **Xuesong Zhou** (Arizona State University)
Simplifying modeling complexity in dynamic transportation systems: a state-space-time network-based framework
- 10:00–10:15 *Break*
- 10:15–11:05 **Sonja Steffensen** (RWTH Aachen)
Numerical methods for dynamic game models
- 11:15–11:30 *Break*
- 11:30–12:20 **Gary Carlin** (INRIX)
Big(Traffic) data decision support applications
- 12:30 *Conclusion*

