### Program of the 4th International Conference on Models and Technologies for Intelligent Transportation Systems (MT-ITS 2015)

**03.06.2015, Wednesday**

**István Varga** (BME - Budapest University of Technology and Economics, dean of faculty)

**Opening and Welcome**

**Kálmán Dábóczi** (BKK - Centre for Budapest Transport, CEO)

**ITS developments in public transport of Budapest**

#### 09:30-10:30

- **Tea room**
  - **transport modeling 1** (Gaetano Fusco)
  - Gennaro Nicola Bifulco (University of Naples Federico II)
  - The impact of the leading vehicle type on car-following behaviours
  - Anahita Jamshidnejad (Delft University of Technology)
  - An iterative procedure for estimating the generalized average speed using microscopic point measurements
  - Marcello Montanino (University of Naples)
  - Parameter sampling strategies in traffic micro-simulation
  - András Mihály (BME - Budapest University of Techn.)
  - Look-ahead cruise control design in Vissim simulation environment

- **coffee break**

- **Gobelin room**
  - **location data based applications 1** (Francesco Viti)
  - Oliver Michler (Technical University Dresden)
  - Model-based and empirical performance analyses for passenger positioning algorithms in a specific bus cabin environment
  - Joschka Bischoff (TU Berlin)
  - Analysis of Berlin's taxi services by exploring GPS traces
  - Guido Cantelmo (University of Luxembourg)
  - Assessing The Consistency Between Observed And Modelled Route Choices Through GPS Data

- **Kave room**
  - **social networks and travel behaviour** (Pnina Plaut)
  - Ruth Conroy-Dalton (Northumbria University)
  - Wayfinding as a social activity
  - Amalia Polydoropoulou (University of Aegean)
  - The influence of social networks on modeling travel behavior: opportunities and challenges
  - Cesare Bartolini (University of Luxembourg)
  - An overview of the limitations to the dissemination of data

#### 11:00-13:00

- **lunch**

- **transport modeling 2** (Vincenzo Punzo)
  - Ioulia Markou, C. Antoniou (National Technical University of Athens)
  - Developing insight into effective SPSA parameters through sensitivity analysis
  - Vittorio Marzano (University of Naples Federico II)
  - A Kalman filter for online quasi-dynamic o-d flows estimation/updating
  - Bojan Kostic (Sapienza University of Rome)
  - Using Traffic Data of Various Types in the Estimation of Dynamic O-D Matrices

- **coffee break**

- **location data based applications 2** (Marialisa Nigro)
  - Michal Certicky (Czech Technical University in Prague)
  - Fully Agent-based Simulation Model of Multimodal Mobility in European Cities
  - Klaas Friso (DAT Mobility)
  - Enriching the transport model of the Rotterdam region by cell phone data
  - Simone Aniello Di Donna (University of Luxembourg)
  - A Markov chain dynamic model for trip generation and distribution based on CDR

- **traffic monitoring 1** (Oliver Michler)
  - Banihan Gunay (Transport at Akdeniz University)
  - Area-wide ANPR coverage with a small number of instrumented vehicles
  - J. Raghothama, M.R. Carretero (KTH - Royal Institute of Technology)
  - Architectures for Distributed, Interactive and Integrated Traffic Simulations
  - Marek Bauer (Cracow University of Technology)
  - The Methodology Of Urban Transport Corridors Evaluation

#### 14:00-15:30

- **vehicle energy optimization** (Gaetano Fusco)
  - Mario Krumnow (Technical University Dresden)
  - Energy-efficient Routing Strategies based on real-time data of a local traffic management center
  - Johannes Asamer (AIT - Austrian Institute of Technology)
  - The elevation factor: digital elevation model quality and sampling impacts on electric vehicle energy estimation errors
  - András Mihály, Zoltán Ádám Milacski (Eötvös Loránd University)
  - Cost and risk sensitive decision making and control for highway overtaking maneuver

- **coffee break**

- **location data based applications 3** (Francesco Viti)
  - Adrian C. Prelipean (KTH - Royal Institute of Technology)
  - Comparative framework for activity-travel diary collection systems
  - Domokos Esztergár-Kiss (BME - Budapest University of Techn.)
  - Simulation results for a daily activity chain optimization method
  - Michael Behrisch (DLR - German Aerospace Center)
  - Modelling and Simulating Bluetooth-based Moving Observers

- **traffic monitoring 2** (Oliver Michler)
  - Marialisa Nigro (Università degli Studi Roma Tre)
  - Analysis of the demand for an electronic advise of traffic code violations
  - Tamás Lóvas (BME - Budapest University of Technology and Econ.)
  - Pedestrian detection by profile laser scanning
  - Domonkos Varga (SZTAKI)
  - Pedestrian detection in surveillance videos based on CS-LBP feature

#### 16:00-17:30

#### 19:00

**gala dinner (Danube palace)**
### Program of the 4th International Conference on Models and Technologies for Intelligent Transportation Systems (MT-ITS 2015)

**04.06.2015, Thursday**

#### plenary session - Tea room

**9:30-10:30**

**Tea room**

**Gobelin room**

**Kave room**

**traffic modeling and estimation 1** (Gennaro Nicola Bifulco)

G. Fusco, C. Colombaroni, N. Isaenko (Sapienza University of Rome)

Short-term traffic predictions on large urban traffic networks: applications of network-based machine learning models ...

Felix Burmeister (DLR - German Aerospace Center)

Optimized energy management of inductively charged electric buses reflecting operational constraints and traffic conditions

William Carvajal-Carreno (UPCOMILLAS-KTH)

Energy Efficient Driving Algorithms For Non-Disturbed And Disturbed Trains With The CBTC Signalling System

**public transport optimization 1** (Balázs Horváth)

Tamas Tettamanti (BME - Budapest University of Techn.)

Traffic speed prediction method for urban networks – an ANN approach

Paolo Dell’Olmo (Sapienza University of Rome)

A new approach for train calendar description generation

Nicolsa Sacco (University of Genoa)

A Modular Model to Schedule Predictive Railway Maintenance Operations

**railway traffic optimization** (Francesco Corman)

Ioulia Markou, Vasileia Papathanasopoulou, Constantinos Antoniou (National Technical University of Athens)

A demonstration of distribution-based calibration

Andreas Kretschmer (INAVET)

A concept of an energy optimal public transportation network

Pengfei Sun (IFSTTAR)

A Model Pattern of Railway Interlocking System by Petri Nets

**traffic control and route choice (Guido Gentile)**

Maximilian Leodolter (AIT - Austrian Institute of Technology) Estimating Travel Times from Static Map Attributes

Balázs Horváth, Richárd Horváth (Széchenyi István University)

Estimation of sample size to forecast travel demand in urban public transport

Raphael Riebl, Hendrik Jörn-Günther (Technische Hochschule Ingolstadt)

Artery - Extending Veins for VANET applications

Maarten Houbranken (Ghent University)

Real-time Traffic Monitoring by fusing Floating Car Data with Stationary Detector Data

Cs. Csiszár, E. Nagy, D. Karádi (BME - Budapest University of Techn.)

Integrated Information Application on Mobile Devices for Air Passengers

László Lengyel (BME - Budapest University of Techn.)

ICT In Road vehicles – Reliable vehicle sensor information from OBD versus CAN

Joaquim Barros (University of Porto)

Short-term real-time traffic prediction methods: a survey

Géza Katona (BME - Budapest University of Techn.)

Compare Ant-colony and Genetic algorithm and introduce their parallel implementations

Felix Burmeister (DLR - German Aerospace Center)

Integrated Modelling of Business Processes and Real Time Communication for Public Transport

**road transport communication 1** (Mario Krumnow)

Mario Krumnow (Technical University Dresden)

Microscopic real-time traffic simulations to support Advanced Driver Assistance Systems

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A concept of an energy optimal public transportation network

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Observing rerouting phenomena in dynamic traffic networks

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An integrated approach to adaptive anticipatory traffic control and parameter estimation

Mohammad Maghrouz Zefreh (BME - Budapest University of Techn.)

Maneuvers analysis of shared taxi and their effects on flow characteristics

Tamás Bécsi (BME - Budapest University of Techn.)

Security Issues and Vulnerabilities in Connected Car Systems

Guido Cantelmo (University of Luxembourg)

Systematic Assessment Of Local & Global Signal Control Policies: A Methodological Perspective

Meng Meng (Nanyang Technological University)

Public Transit Coordination under Different Strategies between Operators

Norbert Varga (BME - Budapest University of Techn.)

LDM-based dynamic network discovery and selection for IPv6 mobility management optimization in C-ITS environments

**11:00-13:00**

**lunch**

**traffic modeling and estimation 2** (Guido Gentile)

Maximilian Leodolter (AIT - Austrian Institute of Technology)

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**coffee break**

**14:00-15:30**

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**15:30-16:30**

**coffee break**

**16:00-17:30**

**traffic modeling and estimation 3** (Luca Quadrifoglio)

Rafal Kucharski (Politechnika Krakowska)

Observing rerouting phenomena in dynamic traffic networks

Károly Farkas (BME - Budapest University of Techn.)

Simulation Environment for Investigating Crowd-sensing Based Urban Parking

Zsolt Szalay (BME - Budapest University of Techn.)

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**19:00**

**conference dinner (panorama boat trip)**
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<th>Time</th>
<th>Traffic Emission and Control</th>
<th>Transport Policy Management 1</th>
<th>Air Traffic Management</th>
<th>Transport Logistics and Economics</th>
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<td>Michael Behrisch (DLR)</td>
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<td>Marcela Sama (Università degli Studi Roma Tre)</td>
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<td>Comparing Emission and Traffic Flow models of different categories</td>
<td>A State-of-the-art Integrated Transportation Simulation Platform</td>
<td>A variable neighborhood search for optimal scheduling and routing of take-off and landing aircraft</td>
<td>Optimizing hybrid operations at large-scale automated container terminals</td>
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<td>Robert Koelbl (AIT)</td>
<td>Csaba Csizsár, Zsolt Sándor (BME - Budapest University of Techn.)</td>
<td>Marina Sergeeva (École Nationale de l’Aviation Civile)</td>
<td>Stefano Carrese, Valerio Cuneo (Università degli Studi Roma Tre)</td>
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<td>Alper Öner (Istanbul Technical University)</td>
<td>Tackling sustainable urban transport policy measures in transport models</td>
<td>Zoltán Schváb, Rita Markovits-Somogyi (HungaroControl)</td>
<td>Ferenc Cselle (FOMTERV)</td>
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<td>A Case Study in Istanbul E-80: Intelligent Speed Change at the Highway for Gas Emission</td>
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<td>Reopening the Kosovo Upper Airspace: Analyzing the first year of operations</td>
<td>The Hungarian national freight transport model</td>
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<td>Status of Land Use and Transport Modelling in Hungary</td>
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**Coffee Break**

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