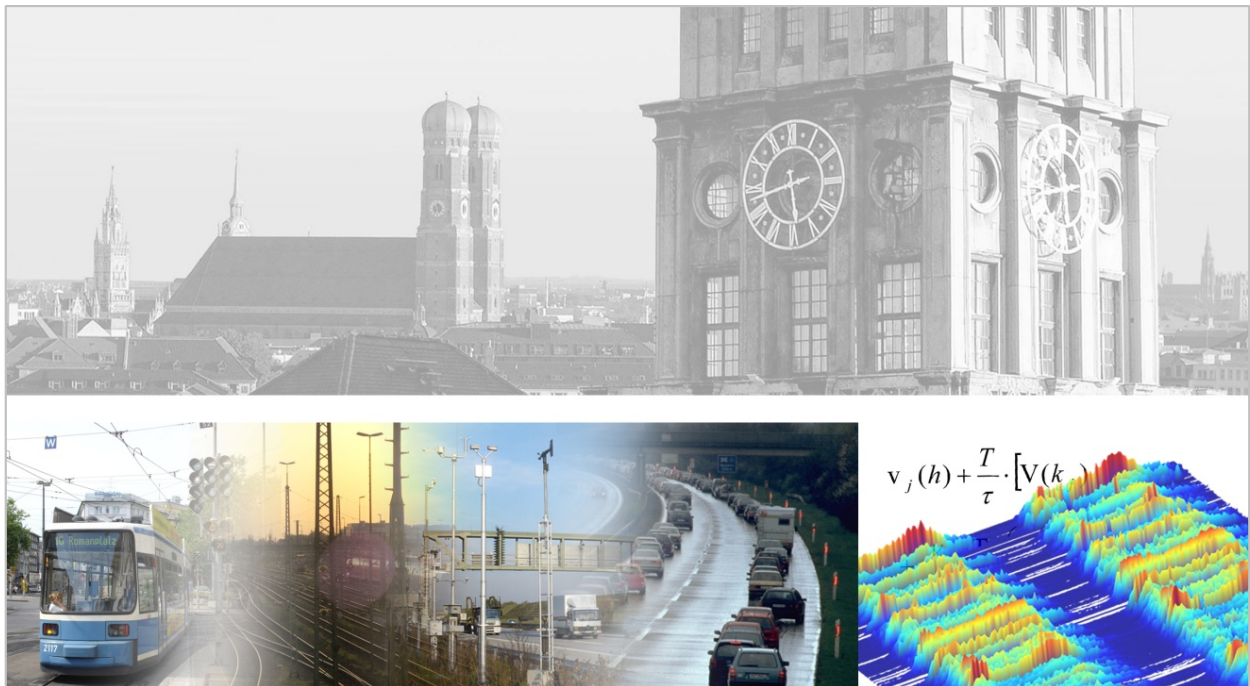# mobil.TUM 2009
International Scientific Conference on Mobility and Transport

ITS for larger Cities

12 & 13 May 2009
Munich, Germany

"We have entered the urban millennium"

Kofi Annan, 2000

Institut für Verkehrswesen
Lehrstuhl für Verkehrstechnik

1st Conference day – Tuesday, 12 May 2009

09:30   **Registration and Welcome Coffee**

10:30   **Opening session**

Welcome and Introduction	Fritz Busch, Technische Universität München
Welcome Address	Wilfried Blume-Beyerle, Munich City Council
The Potential of ITS in the Urban Context	Vito Mauro, Politecnico di Torino

11:30   **Transport System Modeling**   **Session 1A**

Moderator: Henk van Zuylen

Multimodal Transportation Model for the Region of Munich	Fabian Schütte
Does Employment Suburbanisation in Germany Lead to Travel-Reducing Commuting Patterns?	Markus Maciolek
The Evolution of Urban Mobility: Metropolitan Actors and Public Transport	Charlotte Giese

11:30   **Traffic State Estimation**   **Session 1B**

Moderator: Axel Leonhardt

Urban Intersections in first order models with the Godunov scheme	Hans van Lint
Short Term Estimation of OD Matrices and Traffic Streams in Urban Networks	Tobias Pohlmann
Evaluating the Quality of Traffic Flow Based on Drivers' Perception	Timo Munk

13:00   **Lunch**

14:00   **Poster Presentations**

First Intermodal Journey Planner in the Arab World	Liliane Abdul-Reda
Effects of Arrival Flow Uncertainty on Optimal Signal Control	Sonny Abia
Urban Traffic Control in a Cooperative Environment: The Speed Profile Application	Francesco Alesiani
QFCD - A Microscopic Method for Measuring the Content Quality of Traffic Information	Klaus Bogenberger
System for Dynamic Passenger Routing in Case of Incidents	Uwe Böhme
Dmotion - Integrated Traffic Management by Alternative Route and Event-oriented Route Guidance	Timo Finke
Real-Time Simulation of Inner-City Pollution Levels: Software Models and Case Study	Ben Horsfield
More Efficient Traffic by Quality Assurance and New Methods for Green Waves	Markus Mailer
Devices-in-the-Loop Approach - Traffic Simulation Meets Real Devices of Distributed V2I Applications	Thomas Otto
Road Pricing Scheme Supported by Public Transport Busway Using Efficiency and Equity Evaluation	Muhammad Nanang Prayudyanto
Using VS-pCoq for Traffic State Estimation	Thomas Riedel
Dynamic Network Control Bavaria - dNet Bavaria	Reiner Scharrer
Scenario-Based Planning of Traffic Management Strategies	Wilke Reints
Traffic State and Forecast Determination by Coupling of a Microscopic and Macroscopic Traffic Flow Model	Andreas Pottmeier

15:30   **Coffee Break**

16:00   **Environmental Traffic Management and Control**   **Session 2A**

Moderator: Michael G.H. Bell

From Traffic Management to Environmental Traffic Management	Volker Diegmann
Environment-responsive Traffic Control	Sven Kohoutek
Emission Minimizing Traffic Control - Simulation and Measurements	Martin Fellendorf
Model-Based Traffic Control for the Reduction of Fuel Consumption, Emissions and Travel Time	Hans Hellendoorn

16:00   **Floating Vehicle Data**   **Session 2B**

Moderator: Huapu Lu

Investigating the Feasibility of Urban Link Travel Time Estimation Based on Probe Vehicle Data	Fangfang Zheng
Vehicle Probes for Data Collection in Emerging Mega Cities in Asia	Reinhart Kühne
Real Time Application for Traffic State Estimation Based on Large Sets of Floating Car Data	Florian Schimandl
Investigation and Validation of Floating-Car-Data Speed Measurements in the Project Dmotion	Florian Weichenmeier

18:15   **Optional: Guided Tour Deutsches Museum Verkehrszentrum, München**

19:30   **Conference Dinner**

mobil.TUM 2009   Program
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2nd Conference day – Wednesday, 13 May 2009

08:30   **Morning Coffee**

09:00   **Microsimulation and V2X-Communication**   **Session 3A**
Moderator: Larry Head
Optimizing Traffic Control for Emission Reduction: the calibration of the simulation model   Henk van Zuylen / Jie Li
Micro-Simulation Study of the Effect of Roadway Factors on Heterogeneous Traffic Flow on Intercity Roads   Shriniwas S. Arkatkar
Microscopic Simulation of Car-To-Infrastructure Communication and Online Traffic State Estimation   Arne Kesting
Result Assessment for User Acceptance and Safety Evaluation on Motorways with I2V-Communication   Philipp Gilka

09:00   **Traffic Signal Control**   **Session 3B**
Moderator: Robert Braun
Review of Adaptive Traffic Control Deployments in Larger Cities   Aleksandar Stevanovic
Evolutionary Algorithms for Traffic Signal Optimization: A Survey   Holger Prothmann
Application of High Resolution Traffic Signal Controller Data for Platoon Visualization and Optimization of Signal Offsets   Darcy M. Bullock
Network Control Method MOTION: New Developments and Last Evaluation Results   Jürgen Mück

11:00   **Coffee Break**

11:30   **Public Transport**   **Session 4A**
Moderator: Gebhard Wulfhorst
Intelligent Transportation Solutions for Planning, Optimizing and Measuring Public Transport Performance   Robert L. Bertini
Assignment under Consideration of Seat Availability: An Application to London's Underground Network   Jan-Dirk Schmöcker
Governance in Railway Systems   Florian K. Peschelt

11:30   **Transport Modeling and Travel Information**   **Session 4B**
Moderator: Henry Fan
Travel Demand Models - Backbone for Intelligent Transport Systems (ITS)   Thomas Haupt
The Development of Travel Information Systems in Hong Kong   Mei Ling Tam
An Approach to Personalized Route Planning Based on Fuzzy Sets   Amine Mokhtari

13:00   **Lunch**

14:00   **Panel Discussion: ITS for Larger Cities – Challenges for Science and Research**
Moderator: Fritz Busch
Michael G.H. Bell, UK   Henry Fan, Singapore   Huapu Lu, China
Robert L. Bertini, USA   Larry Head, USA   Henk van Zuylen, Netherlands

15:00   **Closing Session**
mobil.TUM Award 2009
See you! Auf Wiedersehen!   Fritz Busch

15:30   **End of the Conference**

ITS for larger Cities

The global population is growing exponentially. Already more than half is living in larger cities, metropolitan regions and megacities.

On the one hand, well functioning transportation systems are vital to ensure a high quality of individual mobility as well as to provide an efficient backbone for the regional economy. On the other hand, the increasing transport negatively effects the environment, the ecology, as well as the economy.

Intelligent Transport Systems (ITS) have evolved to offer a wide range of options to cope with these challenges and to provide environmentally sustainable mobility in larger cities.

The conference aims to progress transport research and its application by

- state of the art reviews
- latest scientific achievements
- technological innovations
- exemplary solutions

The conference will be organized in plenary as well as parallel sessions covering the following areas

- traffic state estimation and transport modeling
- traffic management and control
- cooperative systems based on car2x
- public transport solutions
- transportation demand management

all with a clear focus on larger cities and agglomerations.

Scientific Advisory Board:

Michael G.H. Bell, UK

Robert L. Bertini, USA

Fritz Busch, Germany (chairman)

Henry Fan, Singapore

Larry Head, USA

Huapu Lu, China

Henk van Zuylen, Netherlands

mobil.TUM 2009 – Facts

Conference, 12 & 13 May 2009

Venue

Alte Kongresshalle am Bavariapark
Theresienhöhe 15, D-80331 München, Germany

Fee   380,- € incl. VAT (190,- € for students)

- entrance to 2-day conference and exhibition
- conference proceedings
- 2-day coffee breaks and lunch
- conference dinner
- guided tour Verkehrszentrum

For registration and further information consult this web site:

www.vt.bv.tum.de/mobil.TUM2009

Or contact us directly:

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The conference is supported by:

Short Course "Challenges and opportunities of Vehicle-to-X-Communication"
14 & 15 May 2009

Following the conference, ITS-EduNet - the Intelligent Transport Systems Education Network - presents an interactive short course for transport professionals & decision makers.

Venue

Technische Universität München & Ingolstadt (AUDI AG), Germany

Fee   400,- €

- participation at the whole course program including a site visit
- course materials
- refreshments, lunch and a special course dinner
- transport to Ingolstadt (site visit)
- delivery to Munich airport or the city center after the course

For registration and further information consult this web site

www.its-edunet.org