

**Applied Urban Modelling Conference, 26<sup>th</sup> – 28<sup>th</sup> June 2013 (AUM2013)**  
Alison Richard Building, Sidgwick Site, University of Cambridge

## **PROGRAMME**

**WEDNESDAY 26 JUNE**

**Koen Steemers**, University of Cambridge, *Welcome.*

Introduction: **Mike Batty** (CASA, UCL): *Urban Modelling: The Paradigm Shifts Yet Again*

### **Session 1: Large scale land use and transport modelling - a retrospect**

**Chair:** Neil Paulley TRL Academy, Wokingham, UK

**José Luis Burgos** (Architect): *The use of MEPLAN Model in Bilbao and Basque Country*

**Tomás de la Barra** (Modelistica): *Modelling and Evaluating Redevelopment: Sao Paulo and Caracas*

**Steve Platt** (Cambridge Architectural Research) *The Role of Cambridge Futures in Promoting Growth in Cambridge*

### **Session 2: Policy modelling for city regions - current developments**

**Chair:** John Bates, John Bates Services, Oxford, & Transport Studies Unit, University of Oxford, UK

**Felix Huber**, University of Wuppertal, and **Björn Schwarze**, **Klaus Spiekermann**, **Michael Wegener** (Spiekermann & Wegener): *Modelling the Energy Transition in Cities*

**Tony Hargreaves**, **Vicky Cheng**, **Marcial Echenique**, **Vassilis Zachariadis** (University of Cambridge): *Spatial Planning and the Potential for Decentralised Green Technologies*

**David Simmonds** (David Simmonds Consultancy): *Policy Modelling for City Regions: Current UK Developments with Particular Reference to Appraisal of Transport Proposals*

**John Douglas Hunt** (University of Calgary): *Design and Application of PECAS Model of San Diego*

### **Session 3: Productivity and sustainability of cities**

**Chair:** David Simmonds, David Simmonds Consultancy Ltd, Cambridge, UK

**Paul Waddell** (University of California, Berkeley): *Development of a Sustainable Communities Strategy in the San Francisco Bay Area using Integrated Models*

**Alastair Donald** (British Council): *The Integrated Metropolis: Mixed Use and Travel*

**Jie Zhu** (Zhejiang Transport Planning Institut), **Liang Zhao** (Tsinghua University), **Ying Jin** (University of Cambridge): *A Spatial Computable General Equilibrium Model for Emerging City Clusters in China*

**Laurent Franckx** (VITO), **Inge Mayeres** (VITO and KU Leuven, Belgium):  
*ATLAS –Assessing Transport and Land use Scenarios*

## THURSDAY 27 JUNE

### Session 4: Transit and cities

Chair: Ian Williams, Ian Williams Services, Cambridge, UK

**Jorge Gil** (Delft University of Technology): *Measuring the Sustainable Mobility potential of TOD Neighbourhoods in the City-Region*

**Paul Waddell** (UC Berkeley): *Modelling and Visualizing Transit Oriented Development*

**Haixiao Pan** and Song Xue (Tongji University), Qing Shen (University of Washington): *Intermodal Transfer Between Bicycles and Rail Transit in Shanghai, China*

**Flora Roumpani** (CASA, UCL): *Building and Visualizing Classical and Contemporary Models in ESRI's City Engine*

### Session 5: Mobility and housing

Chair: Thomas de la Barra, Modelistica, Venezuela

**Joseph Ferreira** (MIT), Weifeng Li: *Household Considerations in Valuing Location for Activity-Based Urban Modelling*

**Anders Johansson** (University of Bristol): *Data-Driven Modelling of Urban Mobility*

**Athanasios Votsis** (University of Helsinki and Finnish Meteorological Institute): *A Fractal Geometry / Fuzzy Logic Model for Space-Time Dynamics of Residential Property Value in Helsinki's Urban Region*

**Tatjana Ibraimovic** (University of Lugano), Stephane Hess (University of Leeds): *A Latent Class Model of Residential Choice Behaviour and Ethnic Segregation Preferences*

### Session 6: Urban design and modelling

Chair: Steve Platt, Cambridge Architectural Research, Cambridge, UK

**Randall Crane** (UCLA): *Recent Developments in the Economic Modelling of Urban Design*

**Pete Ferguson** (CASA, UCL): *A Detailed Network Potential Model of London*

**Kiril Stanilov** and Ying Jin (University of Cambridge): *Transport Networks and Land Development – A Historical Perspective*

### Session 7: Understanding consumer behaviour

Chair: Paul Waddell, UC Berkeley, USA

**Tim Gent** (WSP) and Ian N Williams (University of Cambridge): *Evidence of Changing Trends in Travel Behaviour: Implications for Modelling*

**Shan Jiang**, Marta C. González and Joseph Ferreira (MIT): *Using Temporal Activity Profiles to Enrich Lifestyle Considerations in Urban Modelling*

**Peng Wu** (Sichuan University), Bo Feng (South China University of Technology): *Which Adoption Mode for Electric Vehicles is Better?*

**Paavo Moilanen** (Strafica): *Big Data Driving the Model Developments in Finland*

**FRIDAY 28 JUNE**

**Session 8: Modelling and assessment - new methods**

Chair: John Douglas Hunt, University of California, USA

**William Fawcett**, Martin Hughes and Ignacio Robles Urquijo (Cambridge Architectural Research): *Evaluation of Strategies for Long-term Adaptation in Urban and Infrastructure Systems*

**Johannes Bröcker** (University of Kiel): *Discrete Choice in Urban CGE models*

**Daniela Fecht**, Linda Beale, David Briggs (SAHSU, Imperial College London): *A GIS-based Urban Simulation for Environmental Health Analysis*

**Benjamin Kickhöfer** and Kai Nagel (Technische Universität Berlin), Regine Gerike (University of Natural Resources and Life Sciences Vienna): *High-Resolution First-Best Air Pollution Tolls with Heterogeneous Travellers: New Opportunities for Policy Design*

**Session 9: New methods in Transport and traffic modelling**

Chair: Peter Ferguson, Centre for Advanced Spatial Analysis, London, UK

**Alistair Ford**, Stuart Barr and Richard Dawson (Newcastle University); Katie Jenkins and Jim Hall (University of Oxford); Mike Batty (UCL): *Economic Accounting of Climate Change Impacts*

**Vassilis Zachariadis** and Ying Jin (University of Cambridge), Alex Hagen-Zanker (University of Surrey): *Reducing the Computational Requirements of Models of Spatial Interaction*

**Alex Hagen-Zanker** (University of Surrey) and Ying Jin (University of Cambridge): *Reducing Aggregation Error in Spatial Interaction Models by Location Sampling*

Round Table discussion chaired by **Michael Wegener** (Spiekermann & Wegener)

Summary by **Marcial Echenique** (University of Cambridge)