

**Applied Urban Modelling 2018 (AUM2018): Draft Programme**  
**(v06Jun, online release)**

DAY 1 – WEDNESDAY 27 JUNE 2018	
09.00	Registration opens at the foyer of the Crausaz Wordsworth Building (CWB); Coffee and Tea
10.00	<p><b>Symposium opens in the Syndicate Room, 1<sup>st</sup> Floor, CWB</b></p> <p><b>Ying Jin (Director, Martin Centre for Architectural and Urban Studies, Cambridge)</b> Welcome</p>
10.05	<p><b>Session 1: Long term urban change (1)</b></p> <p>Chair: [tbc]</p> <p><b>Michael Wegener, Spiekermann &amp; Wegener Urban and Regional Research (S&amp;W)</b> Modelling Long-term Urban Change</p> <p><b>Keith C. Clarke, University of California, Santa Barbara</b> Urbanization and global change in California</p> <p><b>Roger White, Lien Poelmans, Karolien Vermeiren, Inge Uljee, Guy Engelen, Flemish Institute for Technological Research</b> Long term simulation of urban development scenarios in support of spatial policy planning</p>
11.35	Morning break
11.50	<p><b>Session 2: Long term urban change (2)</b></p> <p>Chair: [tbc]</p> <p><b>Lien Poelmans, Karolien Vermeiren, Carolien Beckx, Steven Broekx, Guy Engelen, Flemish Institute for Technological Research</b> What is urban sprawl in Flanders? Spatial patterns and consequences</p> <p><b>Jiang Qian Ying, Faculty of Regional Studies, Gifu University, Japan</b> Photovoltaic Electricity Generation as Land Use: Long Run and Short Run Impact on Urban Forms</p>

	<p><b>Alistair Ford, Stuart Barr, Nik Lomax, Maria Pregnotato, Andrew Smith, Craig Robson, Vassilis Glenis, Richard Dawson, Jim Hall, School of Engineering, Newcastle University [Alistair to separate the authors into different institutions]</b>  Modelling long-term change for national infrastructure planning</p>
13.20	Lunch
14.20	<p><b>Session 3: Extended papers with discussants</b></p> <p>Chair: [tbc]</p> <p><b>John Douglas Hunt, John E Abraham, Geraldine Fuenmayor, A Silva and GT Hill, University of Calgary</b>  Update on Alberta Spatial Economic and Transport Model Project</p> <p><b>Paul Waddell, Samuel Maurer, Geoff Boeing, University of California, Berkeley</b>  <b>Ignacio Garcia-Dorado, Google Research</b>  <b>Max Gardner, Emily Porter, University of California, Berkeley</b>  <b>Daniel Aliaga, Purdue University</b>  Architecture for modular microsimulation of real estate markets and transportation</p>
16.20	Afternoon break
16.35	<p><b>Session 4: Pecha-kucha - highlights of symposium posters</b></p> <p>Chair: [tbc]</p> <p><b>Tongyun Du, Copenhagen University</b>  Optimization of ecological leisure industrial planning based on improved GIS-AHP: A case study of Shapingba District, Chongqing, China</p> <p><b>Yao Sun and Edwin Chan, Hong Kong Polytechnic University</b>  Applying artificial intelligence to simulate tourist sentiment orientation toward urban scenic spots: Case study of Dapeng district [Edwin to confirm]</p> <p><b>Seongman Jang, Youngsoo An, Jooyeon Go and Seungil Lee, University of Seoul</b>  Mesoscale model of the pedestrian volume based on macroscale model outputs with the four-step model</p> <p><b>Jiyun Song, Paul F. Linden, Shiwei Fan, William Lin, Laetitia Mottet, University of Cambridge</b>  Dynamic thermal modelling towards energy-efficient cities from present to future</p>

	<p><b>Tatjana Ibraimovic, Martyna Bogacz, Stephane Hess, Charisma Choudhury, Chiara Calastri, University of Leeds</b> Who is sitting next to me? The impact of social environment on urban public transport mode choice</p> <p><b>Sigita Zigure, Solon Solomou, Ulysses Sengupta, Manchester School of Architecture</b> Developing scenarios for connected and autonomous vehicle (CAV) enabled sustainable future cities</p> <p><b>Ming Zhong, Wuhan University of Technology</b> <b>John Douglas Hunt, University of Calgary</b> <b>Qi Tang, Xiaofeng Ma, Wuhan University of Technology</b> Scissor difference of socioeconomics, travel and space consumption behaviour of rural and urban households and its impact on modelling accuracy and data demand of a PECAS model</p> <p><b>Pai Li, Ying Long, Qizhi Mao, Tsinghua University, Beijing</b> An investment decision model for planning office buildings and its application in Beijing</p> <p><b>Luca D'Acci, Erasmus University Rotterdam, Politecnico di Torino, Erasmus University Rotterdam &amp; University of Birmingham</b> Urban modelling for long term urban forms change: Isobenefit Urbanism for sustainable cities evolutions</p> <p><b>Arnor Elvarsson, Claudio Martani, Bryan T. Adey, ETH Zürich</b> Flexible parking infrastructures: The use of real option to account for future mobility uncertainty</p> <p><b>Paul Larcey, University of Cambridge</b> [Title to be confirmed]</p> <p><b>Shlomit Flint Ashery, University College London</b> The role of Social housing in generating long-term urban change: the case study of Whitechapel</p> <p><b>Bryn Pickering, University of Cambridge</b> [tbc]</p> <p>[To be grouped with around 10 posters from Cambridge, for better assimilation]</p>
18.00	<p><b>Poster-side conversations</b> Drinks are served, followed by buffet supper at the Crausaz Wordsworth Building</p>
	<p>End of Day 1 proceedings</p>

	<b>DAY 2 – THURSDAY 28 JUNE</b>
08.30	Registration and refreshments
08.45	<p><b>Session 5: Progress in model theories</b></p> <p>Chair: [tbc]</p> <p><b>Yoshitsugu Hayashi, Chibu University, Japan</b> Quality of life accessibility method for SDGs evaluation of land use–transport policies</p> <p><b>Francisco Javier Martinez, University of Chile</b> Microeconomic modeling in urban science</p> <p><b>Tomás de la Barra, Central University of Venezuela</b> <b>Liu Liu,</b> Combined discrete-choice modal split and assignment</p> <p><b>Robin Morphet, University College London</b> Equipartition and the gravity model</p>
10.45	Morning break
11.00	<p><b>Session 6: Applications at the microscale</b></p> <p>Chair: [tbc]</p> <p><b>Joseph Ferreira, MIT</b> <b>Mi Diao, National University of Singapore</b> <b>Diem Le, Xiaohu Zhang, Singapore/MIT Alliance for Research and Technology</b> <b>Roberto Ponce Lopez, Jingsi Shaw, MIT</b> <b>Yi Zhu, Shanghai University of Finance and Economics</b> <b>P. Christopher Zegras, MIT</b> Integrating Accessibility Measures into the Microsimulation of Daily Real Estate Market Dynamics</p> <p><b>Kazuki Nakamura, Meijo University, Japan</b> <b>Varameth Vichiensan, Kasetsart University, Thailand</b></p>

	<p>Disaggregation of a residential utility function to internalise socioeconomic and mobility characteristics into the value parameters: the case of a growing city</p> <p><b>Ming Zhong, Wuhan University of Technology</b>  <b>John Douglas Hunt, University of Calgary</b>  <b>Haixiao Pan, Tongji University</b>  <b>Wanle Wang, Wuhan University of Technology</b>  <b>Jianzhong Li, Wuhan Transportation Planning Institute</b>  <b>Wei Yang, Wuhan Transportation Planning Institute</b>  <b>Tao Chen, Tongji University</b>  <b>Xuan Wang, Guangzhou Transportation Planning Institute</b>  <b>Xianlong Chen, Guangzhou Transportation Planning Institute</b>  Cultural, Organizational, and Technical Challenges and Mitigating Solutions in Developing  PECAS Models for Cities of Shanghai, Wuhan and Guangzhou</p> <p><b>Tatjana Ibraimovic, Stephane Hess, Romain Crastes dit Sourd, University of Leeds</b>  <b>Hazvinei T.T. Moyo, Mark Zuidgeest, University of Cape Town</b>  Segregation and city development: A comparison of two cities in developing and developed  country contexts</p>
13.00	Lunch
14.00	<p><b>Session 7: Lionel March: In Memoriam</b></p> <p><b>Chair: Michael Batty</b></p> <p>[Speaker to confirm – Life and career of Lionel March]</p> <p>[Speaker to confirm – Building level modelling?]</p> <p><b>Marcial Echenique</b>  Lionel March and urban modelling</p> <p><b>Michael Batty</b>  Remembering Lionel March: Configuration, Information and Spatial Interaction</p>
15.30	Afternoon break
15.45	<p><b>Session 8: Innovations on the front line of applied urban modelling</b></p> <p><b>Chair: [tbc]</b></p> <p><b>Mostapha Harb, Michael Hagenlocher, Davide Cotti, United Nations University</b>  <b>Elke Krätzschar, Hayet Baccouche, Karem Ben Khaled, Felicitas Bellert,</b>  <b>Industrieanlagen-Betriebsgesellschaft mbH (IABG)</b>  <b>Bourouai Chebil, Anis Ben Fredj, Sonia Ayed, The Municipality of Monastir</b>  <b>Matthias Garschagen, United Nations University</b>  Simulating urban growth scenarios in the context of city development: findings from  Monastir, Tunisia</p>

	<p><b>Michael Ndwiga, Richard Mulwa, Juha Siikamaki and Jessica Alvsilver, University of Nairobi</b> Valuing Urban Green Spaces and Nature Restoration in a Developing Country: Application of Choice Experiment</p> <p><b>Javier Urquizo, Carlos Calderónb, and Philip Jamesc, University of Newcastle upon Tyne</b> Random-effect energy regression models for clustered sub-city area fuel poverty data</p> <p><b>Geraldine Fuenmayor, HBA Specto Inc</b> <b>Ana Morais, Metro de Panama</b> <b>Natalia Cruz, Nippon-Koe</b> Simulating the impacts of the metro system for the Panama Metropolitan Area using TRANUS</p> <p><b>John Abraham, Geraldine Fuenmayor, HBA Specto Inc</b> Policy analysis of densification for the City of Atlanta using PECAS</p> <p><b>Samuel Maurer, Paul Waddell, University of California, Berkeley</b> Template-based task orchestration for urban modelling</p>
17.45	Supper in College
	End of Day 2 proceedings

	DAY 3 – FRIDAY 29 JUNE
08.30	Registration and refreshments
08.45	<p><b>Session 9: Infrastructure modelling</b></p> <p>Chair: [tbc]</p> <p><b>Stuart Barr, Craig Robson, Qingyuan Ji, Thomas Gilbert, Alistair Ford, Maria Pregolato, University of Newcastle upon Tyne</b> Integrated urban-infrastructure systems analytics and modelling: A data management perspective</p> <p><b>Bryan T. Adey, Claudio Martani, Natalia Papathanasiou, Marcel Burkhalter, ETH Zürich</b> Principles for estimating and communicating the sustainability of intervention programmes on infrastructure</p> <p><b>Qian Wang, Ji-fu Guo, Kai Xian, Beijing Transportation Research Institute</b> Method of urban rail network planning based on cellular signal data</p> <p><b>Rolf Moeckel, Technical University of Munich</b> Microsimulation for Long-Term Forecasting: Simulation of Travel Behaviour and Demographics of Low-Income Households and People with Disabilities</p>
10.45	Morning break
11.00	<p><b>Session 10: Modelling for planning and design</b></p> <p>Chair: [tbc]</p> <p><b>Michael Reilly, Metropolitan Transportation Commission, San Francisco, California</b> Agile urban modelling to support regional planning in the San Francisco bay area</p> <p><b>Anqi Wang, Edwin Chan, Hong Kong Polytechnic University</b> Designing incentive-compatible mechanisms with agent-based model to improve public welfare in green neighbourhood planning</p> <p><b>Haixiao Pan, Tongji University, Shanghai</b></p>

	<p>Mode choice of short distance travel in Shanghai</p> <p><b>Patrick Janssen, National University of Singapore</b> The extruded city: geospatial coding with Möbius modeller</p>
13.00	Lunch
14.00	<p><b>Session 11: Looking forward</b></p> <p>Chair: [tbc]</p> <p><b>John Miles, Elham Asadi, Ammar Anwar, University of Cambridge</b> Urban congestion – will it increase, or decrease, with the coming of autonomous vehicles?</p> <p><b>Alan Robins, W Lin, University of Surrey</b> <b>J Song, S Fan, University of Cambridge</b> <b>L Mottet, H Wooward, Imperial College London</b> <b>M Davies Wykes, University of Cambridge</b> <b>R Arcucci, D Xiao, Imperial College London</b> <b>J Debay, University of Cambridge</b> <b>H ApSimon, Imperial College London</b> <b>E Aristodemou, South Bank University</b> <b>D Birch, M Carpentieri, University of Surrey</b> <b>F Fan, M Herzog, GR Hunt, RL Jones, University of Cambridge</b> <b>C Pain, D Pavlidis, Imperial College London</b> <b>CA Short, PF Linden, University of Cambridge</b> MAGIC (Managing Air for Green Inner Cities) Modelling</p> <p><b>Ying Long, Tsinghua University, Beijing</b> Street-scale applied urban modelling: opportunities, progresses, and prospects</p> <p><b>Ian Williams, Ian Williams Services, Cambridge</b> Understanding and forecasting urban rail passenger traffic</p>
16.00	<b>Afternoon break</b>
16.15	<p><b>Roundtable</b></p> <p>Chair: [tbc]</p>
17.30	<b>Further conversations in the garden, Robinson College, Cambridge</b>
19.00	<b>Drinks and dinner at the University Centre, Granta Place, Cambridge, CB2 1RU</b> (Professor Michael Wegener's Birthday)