Applied Urban Modelling 2018 (AUM2018): Draft Programme

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

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

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

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

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

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

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

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