AUM2020: Modelling the New Urban World

Online global workshop, 28 January 2021

Hosted by Martin Centre for Architectural and Urban Studies, University of Cambridge
(Programme overview – working version 3.1 updated 27 January 2021)

Live Programme (version 3f)

UK time	Speaker location(s)	Local time(s)	Theme and presentations
Session 1			
3-5am	Oceania	Sydney: 2-4pm (GMT+11)	**CITY ANALYTICS (1)** **Jonathan Corcoran (The University of Queensland)** Familiar strangers and urban analytics: mapping, measuring and monitoring **Hoon Han (University of New South Wales)** Vertical Land Use Mix and Industrial Ecosystem **Somwrita Sarkar (University of Sydney)** Polycentric urban growth and evolving access to jobs and social infrastructure: the role of new data sources, and implications of unexpected extreme events (e.g. COVID-19) Convenor: **Christopher Pettit (University of New South Wales)** Discussant: **Sharon Biermann (University of Western Australia)** Host: **Ying Jin (University of Cambridge)**

Session 2			
5-7am	China	China: 1-3pm (GMT+8)	**CITY ANALYTICS (2)** **Jieling Che (The Rising Lab, China Business Network)** Growing trend of new first-tier cities in china through big data: Breakthrough, diversity and innovation **Frank Zhao (Shanghai MetroData Tech)** Hangzhou's "city brain": a bureaucratic reform about to come? **Haokun Fu (Beijing UrbanXYZ Technology Co., Ltd)** The practice of community governance on Shuangjing international sustainable development community pilot based on new urban science Convenor: **Qizhao Mao (Tsinghua University)** Discussant: **Haixiao Pan (Tongji University)** Host: **Tianren Yang (University of Cambridge)**
Session 3			
7-9am	Japan and South East Asia	Japan: 4-6pm (GMT+9) Bangkok: 2-4pm (GMT+7)	**URBAN TRANSPORT IN SOCIETAL CONTEXT** **Yoshitsugu Hayashi (Chubu University)** Economic growth, urbanisation, motorisation and environment nexus – An international perspective **Varameth Vichiensan (Kasetsart University)** New-normal residential preference in Bangkok **Junyi Zhang (Hiroshima University) and** **Baoxin Zhai (Tongji University & Hiroshima University)** Modeling of interactions between land use and transport from a behavioral and psychological perspective – Research overview **Witsarut Achariyaviriya, Yoshitsugu Hayashi and Hiroyuki Takeshita (Chubu University)** A Sufficiency based Spatial-temporal Planning for Daily Activity-travel Supporting New Normal for Flexible Working **Masanobu Kii (Kagawa University) and Varameth Vichiensan (Kasetsart University)** Spatial Scenarios of Urban Core Functions under the Railway Extension: Case of Bangkok, Thailand **Apiwat Ratanawaraha (Chulalongkorn University)** Lifestyle changes and transport – land use innovation in Bangkok Convenor: **Yoshitsugu Hayashi (Chubu University)** Discussants: **Kazuki Nakamura (Meijo University),** **Hiroyuki Takeshita (Chubu University)** Host: **Ying Jin (University of Cambridge)**

Session 4			
9-11am	Europe	Switzerland and Sweden:10-12am (GMT+1) Finland:11am-1pm (GMT+2)	**MODELLING METHODS (1)** **Tim Hillel, Janody Pougala, Patrick Manser, and Wolfgang Scherr (École polytechnique fédérale de Lausanne (EPFL), Switzerland)** Validating disaggregate models at an aggregate scale in a case study of mobility tool ownership in Switzerland **Athanasios Votsis, Reija Ruuhela, and Hilppa Gregow (Finnish Meteorological Institute)** Healthy, resilient, livable cities? Evidence from Helsinki's 2018-19 heatwaves **Jonathan Cohen and Jorge Gil (Chalmers University of Technology)** Circular Economy meets Smart Cities: A general data model for waste flows in city regions **Claudio Martani, Noemi Fiorot, Andrea Gonzalz, Bryan T. Adey, and Joris Van Wezemael (ETH Zürich)** Preparing offices for the age of distributed work. Evaluating the impacts of flexible designs in coping with the uncertain future demand for office space Convenor and Discussant: **Mike Batty (University College London)** Host: **Jamil Nur (University of Cambridge)**
Session 5			
11am-1pm	India and USA	India: 4.30-6.30pm (GMT+5:30)	**CRITICAL ISSUES UNDER RAPID URBANISATION** **Darshini Mahadevia (Ahmedabad University)** Reconceptualising Sustainable Mobility - The Housing Transport Nexus **Bhargav Adhvaryu (Ahmedabad University)** Public Transport Accessibility and Planning Policy **Amit Patel (University of Massachusetts Boston)** Conceptualizing Slums and Cities as Networks: Implications for Urban Planning and Public Health **MS Raghavendra (Centre for VENUS & Ashoka School of Planning and Architecture)** India's Urban Water Infrastructure: Need for Policy on Permeable Cities **Shweta Manchanda (School of Planning & Architecture, New Delhi)** Addressing Energy Consumption in India's Housing Sector **CS Raghuram (Trilogue Studio and C R Narayana Rao Consultants)** Technology as a Tool for Rapid Adaptive Response in Building Design and Construction Discussant: **Marcial Echenique (University of Cambridge)** Host: **Steve Denman (University of Cambridge)**

Session 6			
1-3pm	Africa and Latin America	Kenya: 4-6pm (GMT+3) Colombia: 8-10am (GMT -5)	**THE WORLD'S METROPOLITAN REGIONS: OVERVIEW AND CASE STUDIES** **Rafael H. Forero H. (UN-Habitat)** The global state of metropolis: An overview **Maria Tellez Soler (UN-Habitat)** Improving metropolitan management in Latin America: The cases of Colombia, Bolivia and El Salvador **Professor Nguendo Yongsi (tbc) / Frederic Happi (UN-Habitat)** Improving metropolitan management in Africa: The case of Cameroon Convenor and Discussant: **Remy Sietchiping (Chief of the Policy, Legislation and Governance Section, UN-Habitat)** Host: **Ying Jin (University of Cambridge)**
Session 7			
3-5pm	UK	UK: 3-5pm (GMT)	**NEW MODELLING FRONTIERS** **Corinne Mulley (University of Sydney)** Challenging policies that prohibit public transport use: travelling with pets as a case study **David Simmonds (David Simmonds Consultancy and Heriot-Watt University)** Land use and transport modelling for COVID-19 mitigation **David Metz (University College London)** The model failed to forecast the result of M25 motorway widening Discussant: **Marcial Echenique (University of Cambridge)** Host: **Mingfei Ma (David Simmonds Consultancy and University of Cambridge)**
Session 8			
5-7pm	Europe	UK: 5-7 pm (GMT) Italy and Switzerland: 6-8 pm (GMT+1)	**MODELLING METHODS (2)** **Gael Lederrey, Tim Hillel, and Michel Bierlaire (École polytechnique fédérale de Lausanne (EPFL), Switzerland)** Synthetic population generation using GANS and expert knowledge **Ahmed H. M. Eldesoky (Università Iuav di Venezia), Nicola Colaninno (Politecnico di Milano) and Eugenio Morello (Politecnico di Milano)** High-resolution air temperature mapping in data-scarce areas by means of low-cost mobile measurements and machine learning **Juste Raimbault and Michael Batty (University College London)** Building and validating modular urban transportation models using scientific workflow systems Discussant:

			Ying Jin (University of Cambridge) Host: **Kaveh Jahanshahi (ONS and University of Cambridge)**
7-9pm	North America	US East Coast: 2-4pm (GMT-5)	**MODELLING URBAN ACTIVITIES** **Rounaq Basu and Joseph Ferreira (Massachusetts Institute of Technology)** How do car-lite policies impact housing mobility choices? A LUTI microsimulation analysis **Nael Alsaleh and Bilal Farooq (Laboratory of Innovations in Transportation (LiTrans), Ryerson University)** Spatio-temporal Demand Modelling for On-Demand Transit Services **Xiaohu Zhang and Joseph Ferreira (Massachusetts Institute of Technology)** Sensitivity analysis of housing market simulation **He He and P. Christopher Zegras (Massachusetts institute of Technology)** Temporally explicit models of firm behaviour Convenor and Discussant **Joseph Ferreira (Massachusetts Institute of Technology)** Host: **Ying Jin (University of Cambridge)**
9-11pm	Trans-Atlantic	Toronto:4-6pm (GMT-5) South California:1-3pm (GMT-8)	**THE ECONOMICS OF CITIES** **Saeed Shakib, Jason Hawkins, Mark Purdon, and Khandker Nurul Habib (University of Toronto)** Development of an Integrated Land Use and Transportation Model for Planning Deep Decarbonization in the Greater Toronto Metropolitan Region, Canada **Aya Badawy, Nuno Pinto, and Richard Kingston (University of Manchester)** Simulating urban negotiations using agent-based modelling: the case of Section 106 negotiations in UK **Janody Pougala, Tim Hillel, Rico Krueger, and Michel Bierlaire (EPFL)** Parameter estimation for an integrated choice model of daily activity scheduling **Andrii Parkhomenko (University of Southern California) and Matthew Deventhal (Claremont McKenna College)** Spatial Implications of Telecommuting Discussant: **Jamil Nur (University of Cambridge)** Host: **Li Wan (University of Cambridge)**

Timelines for the online AUM2020 global workshop

18 September 2020	Call for presentations launched
18 December 2020	Deadline for submitting abstract for and draft pdf of presentations
6 January 2021	Confirmation of presentation selection
27 January 2021	**Submission of final pdf presentation and optional presentation recording**
28 January 2021	**Online global workshop day**