

03-Nov

Pre Colloquium Workshop

10:00 Facilitating quantitative methods pedagogy: Digitalization, innovation, and future needs

2:00 Opening Session

	Critical Issues in Quantitative Geography		Urban Form		Scaling Laws and Urban Form				
2:30	1	Sebastien Bourdin and André Torre Geography of contestation: a study on the yellow vests movement and the rise of populism in France	2	Mirjam Schindler Tackling urban air pollution concerns through urban form – Lessons from a GIS-based residential choice model with micro-economic foundation	19	Raphaël Bubloz Convolutional neural networks for building types classification in Switzerland			
2:40	4	Anna Dmowska, Tomasz Stepinski and Jakub Nowosad A spatio-racial pattern in the US cities	28	Bowen Zhang, Chen Zhong and Qili Gao A Novel Regionalisation Algorithm for Redrawing Cities' Functional Boundary within Mega-city Region	21	Roger Vazquez and Roberto Ponce-Lopez A data-driven methodology to identify urban form and characterize its functionality			
3:10	PS_A1	6	Alicia Bianchi, Giovanni Fusco and Karine Emsellem The real estate ads, a new data source to understand the social representation of urban space.	PS_A2	26	Olivier Bonin and Arthur Benichou Stability of urban forms: modelling the emergence of collective behaviour in residential trajectories	PS_A3	31	Paul Kilgarriff, Remi Lemoy and Geoffrey Caruso A new city definition from the radial homothetic scaling law
3:30		50	Jonny Huck, Duncan Whyatt, John Dixon, Gemma Davies, Brendan Sturgeon, Neil Jarman and Dominic Bryan An Empirical Agent Based Modelling approach to Evaluating Intergroup Contact Theory		14	Michele Tirico, Stefan Balev, Antoine Dutot and Damien Olivier Morphogenesis of street networks. A reaction-diffusion system for self-organized cities		32	Giampiero Lombardini Power law, scaling and the "degrowth geographies". The case of Italy
3:50		70	Pakinam Hassan Perceptions towards improving the participatory urban planning in Alexandria, Egypt	77	Hanae El Gouj, Paul Bouman, Liubov Tupikina and Claire Lagesse Road network characterization to understand city evolution	<b>Discussion</b>			
4:40	<b>Discussion</b>		<b>Discussion</b>						

5:00 Keynote Lecture Prof Luís Bettencourt

04-Nov

Exploration and validation of spatial simulation models		The multitude of spatiotemporal scales in urban systems		Networks		Transport and Urban Form		
9:00	3 Dani Broitman and Yakov Ben-Haim	Forecasting Residential Sprawl Under Uncertainty: An Info-Gap Analysis	54 Kerry Schiel, Geoffrey Caruso and Mirjam Schindler	40 years of sprawl in the USA – Scale and Geographic Effects	8 Aleksey Ogulenko, Itzhak Benenson, Marina Toger, John Östh and Alexey Siretskiy	The fallacy of the closest antenna: Towards an adequate view of device location in the mobile network	15 Romain Loup, Guillaume Guex and François Bavaud	Estimating individual journeys from collective transfers at bus stops
9:20	72 Juste Raimbault and Denise Pumain	How validation through model exploration empowers theories of spatial complexity: example of urban systems	23 Pierre Frankhauser and Olivier Bonin	Multifractal geometry for integrating several challenges of sustainable metropolitan planning	34 Natalia Zdanowska and Robin Morphet	The Northern Cities of the United Kingdom: firm ownership links, productivity and interconnection	24 Efrat Blumenfeld-Lieberthal, Nimrod Serok and Shlomo Havin	Evaluation and prioritization of urban traffic bottlenecks
9:40	52 Jingyan Yu, Alex Hagen-Zanker, Naratip Santittisadeekorn and Susan Hughes	Bayesian calibration of cellular automata urban growth models from urban genesis onwards	30 Thomas Louail and Marc Barthelemy	A dominance tree approach to systems of cities	57 Nikita Sinitsyn	"VKontakte" social network behavior patterns: case study of Vologda region	75 Anna Ibraeva, Gonçalo Correia, Cecília Silva and Antonio Pais Antunes	Post-Metro Mode Choice Changes: from Macro- to Micro-Analysis
10:00	73 Juste Raimbault and Michael Batty	Sensitivity analysis of the MATSim transport model	37 Rémi Lemoy, Geoffrey Caruso and Paul Kilgariff	Radial analysis and scaling of urban land use and sprawl	59 Robin Cura	Leveraging GeolPs as a source of understanding and comparing infra-regional spaces	33 David Burg	Modelling urban population density of employment centres: Israel case study
10:20	90 Jasper van Vliet, Bep Schrammeijer, Yuan Wang and Niels Debonne	What metrics don't reveal: process accuracy and the evaluation of land use models	38 Axel Pecheric, Rémi Lemoy, Marion Le Texier and Geoffrey Caruso	Geovisualization of artificial land use in European cities in 2006, with urban scaling laws	40 Roberto Ponce López, Diego Fabián Lozano-García, Sebastian Fajardo, Alicia Landin Quiros and Pedro Pachecho	The economic cost of urban sprawl approximated by the cost of maintaining road infrastructure in Monterrey	36 Yahya Gamal and Nuno Pinto	Decision Making and Land Market Preferences: A Land Use Agent Based Model
10:40	<b>Discussion</b>		<b>Discussion</b>		<b>Discussion</b>		<b>Discussion</b>	

Exploration and validation of spatial simulation models		The multitude of spatiotemporal scales in urban systems		Mobility and Distance		Rural to Urban		
11:20	67 Aya Badawy, Nuno Pinto and Richard Kingston	Exploring methods for simulating urban negotiations	88 Jan Friedrich, Seraphim Alvanides and Janka Lengyel	On the modeling of the interdependences of spatial scales in urban systems	56 Golan Ben-Dor, Ido Klein, Aleksey Ogulenko, Eran Ben-Elia and Itzhak Benenson	Congestion and Parking Prices in a Shared Automated Vehicle Future: A Case Study of Jerusalem	18 Fanny Sarkissian, Jean-Philippe Antoni and Teddy Loyer	Settling the challenges of a sustainable city through the dynamic representation of an urban agriculture system
11:40	58 Pendula Ferdinand, Bo Pieter Johannes Andree and Eric Koomen	Validating a global urbanisation model	47 Sofia Fellini, Pietro Salizzoni and Luca Ridolfi	Structural fragility of cities to airborne releases	20 Fabian Wenner, Johannes Moser and Alain L'Hostis	Which Regions Benefit from Rail Accessibility? Germany 1990-2030	5 Timur Gusakov	Types of Crimean Rural Settlement
12:00	78 Juste Raimbault	Benchmarking road network growth models	89 Janka Lengyel, Stéphane Roux, François Sémecurbe, Stéphane Jaffard and Patrice Abery	Defining roughness and intermittency within metropolitan regions	7 Satoru Kumagai, Kenmei Tsubota, Toshitaka Gokan, Kazunobu Hayakawa, Ikumo Isono and Souknilanh Keola	Economic and Environmental Impacts of Dedicated Freight Corridors in India	71 Anasua Chakraborty, Jacques Teller and Hichem Omrani	Impact of Static and Dynamic Drivers on Urban Densification
12:20	49 Jingyan Yu, Alex Hagen-Zanker, Naratip Santittisadeekorn and Susan Hughes	Spatial and temporal transferability of urban growth models - A data-driven framework of multi-area, multi-period calibration, growth mode clustering, and scenario development	62 Haocheng Sun, Michael Batty and Chen Zhong	Measuring the Polycentricity based on urban and intercity transportation networks in Greater Bay Area: a cross-scale method in the context of Node-Place model	29 Alain L'Hostis	Introducing "Contextual Metrics" as a mathematical definition for a comprehensive approach of geographical distances	10 Hiroyuki Usui	A bottom-up approach for delineating urban areas: Simultaneous optimisation of criteria for building interval and built cluster size minimising the connection cost of buildings by roads
12:40	<b>Discussion</b>		43 Tomasz Stepinski and Mahmoud Saeedimoghaddam	Multiplicative random cascade models of urban structures	87 Didier Josselin	An extension of the Tobler's law? Influence of the metric to compute the distance between an optimal facility and its demand points.	<b>Discussion</b>	
1:00	<b>Discussion</b>		<b>Discussion</b>		<b>Discussion</b>		<b>Discussion</b>	

2:00 Keynote Lecture Prof Michael Batty

Special Session in honour of Martin Charlton		Energy and Industry		Perception of Urban Space		
4:00	42 Chris Brunson	Whats in a Name? A Spatial Analysis of British Public House Names	79 Fernando Benitez-Paez and Mark Birkin	Studying social inequality in urban energy use in the UK	85 Roel Yosifof and Dafna Fisher-Gewirtzman	Simulating pedestrian's visual perception: Dynamic 3D quantitative analyses
4:20	55 Alexis Comber, Paul Harris and Chris Brunson	A spatial analysis of prescribing data: revisiting the 'Geographical Analysis Machine	86 Marion Nativel	Integrating stated preferences, landscape metrics and attitudes to assess visual impact of wind turbines.	83 Ron Bar-Ad, Geoffrey Caruso, Nuno Pinto and Markel Vigo	Perceived Variables in Virtual Reality: A Methodological Analysis
4:40	91 Steve Carver, Chris Brunson and Alexis Comber	Training Sets and Train Sets: How organs, pubs and railways inter-relate	53 Andrei Korotkov, Artem Kushlevich, Dmitry Rusakov, Roman Menyalschikov, Nikita Sinitsyn and Mikhail Elyutin	Wood trade regions of Russia	25 Osher Ann Lapid and Efrat Blumenfeld Lieberthal	On Tel Aviv's Roofs
5:00	<b>Discussion</b>		82 Denisa Naidin and Sabine Dörny	The Luxembourgish Space Industry – Evolving Between Local and Global Forces	80 Anna Zanchetta and Mark Birkin	The future of high streets: investigating post-pandemic scenarios in the UK
5:20	<b>Discussion</b>		<b>Discussion</b>		<b>Discussion</b>	

7:00 Celebration Martin Charlton

05-Nov

Sustainable Mobility and Equality in Mega-city Regions: Patterns, Mechanisms and Governance			Climate change mitigation strategies at urban and territorial scales: modelling tools and quantitative impact assessment		Health and Gender	
9:00	41	Junwen Lu and Suhong Zhou	60	Giulia Benati and Federico Martellozzo	81	Stefania Bertazzon, Alison Hanes, Rizwan Shahid and Isabelle Couloigner
9:20	39	Qili Gao, Chen Zhong and Yang Yue	69	Sabrina Lai	63	Ido Klein, Golan Ben-Dor, Aleksey Ogulenko, Avner Saadoun and Itzhak Benenson
9:40	48	Suhong Zhou, Linsen Wang, Jiangyu Song, Junwen Lu and Zhong Zheng	84	Marlène Boura and Geoffrey Caruso	68	Léo Taillandier
10:00	11	Mingxiao Li, Wei Gao, Wei Tu and Bichen Fang	66	Estelle Mennicken, Geoffrey Caruso, Rémi Lemoy, Philippe Gerber and Alex Hagen-Zanker	16	Bochu Liu, Michael Widener and Lindsey Smith
10:20	35	Apeksha Tare, Merten Nefs, Eric Koomen and Erik Verhoef	17	Yufei Wei, Geoffrey Caruso and Rémi Lemoy	27	Lindsey Smith, Bochu Liu and Michael Widener
10:40	<b>Discussion</b>		<b>Discussion</b>		<b>Discussion</b>	

Sustainable Mobility and Equality in Mega-city Regions: Patterns, Mechanisms and Governance			Health and Well-being		Diverse topics in quantitative geography	
11:20	9	Zifeng Chen and Anthony Yeh	12	Marie Ramel-Delobel, Thomas Coudon, Lény Grassot, Delphine Praud, Béatrice Fervers and Pietro Salizzoni	45	Yongxin Yang
11:40	62	Haocheng Sun, Michael Batty and Chen Zhong	13	Madeleine Guyot, Ingrid Pelgrims, Raf Aerts, Eva M. De Clercq, Isabelle Thomas and Sophie O. Vanwambeke	61	Tsutomu Tsuboi
12:00	46	Jinzhou Cao, Wei Tu, Chen Zhong, Qili Gao and Qingquan Li	74	Stefania Bertazzon, Caitlin Calder-Bellamy, Rizwan Shahid, Isabelle Couloigner and Yui Tanagi	65	Xiang Ye, Renzhong Guo, Siru Li, Ding Ma and Zhigang Zhao
12:20	76	Zhiyuan Li and Juste Raimbault	64	Lény Grassot, Yohan Fayet, Delphine Praud, Béatrice Fervers and Thomas Coudon	44	Angelos Mimis and Kostas Bithas
12:40	51	Daniela Vanessa Rodriguez Lara and António Nelson Rodrigues da Silva	22	Guoqiang Wu, Alison Heppenstall and Nik Lomax	92	António Ross, Neil Walton and Nuno Pinto
1:00	<b>Discussion</b>		<b>Discussion</b>		<b>Discussion</b>	

3:00 Keynote Lecture Prof Rachel Franklin

4:45 Conclusions and Closing Session