

Welcome to the Urban Big Data Centre Inaugural Workshop

Please visit www.ubdc.ac.uk for more information.

Twitter: @UrbanBigData Event Hashtag: #UBDCLaunch

AGENDA

Please note the final 15 minutes of each presentation will be allocated to Q&A.

1:30pm - 2:00pm Guest Reception Sign-in

- Refreshments and light lunch available prior to event

2:00pm - 2:15pm Welcome and Introduction

- Prof Piyushimita (Vonu) Thakuria, Director, Urban Big Data Centre; Halcrow Chair of Transport, Professor, Urban Studies; Affiliated Professor, School of Engineering, University of Glasgow

2:15pm - 3:00pm Modelling across scales and time: from urban to global, from ancient to modern

- Sir Alan Wilson FBA, FRS, Professor of Urban Regional Systems, Centre for Advanced Spatial Analysis, University College London; Chair, Lead Expert Group, Foresight 'Future of Cities' Project, Government Office for Science

20 minute comfort break

3:20pm - 4:00pm Urban Big Data Multi-Sectoral Model

- Prof Gwilym Pryce, Director, Sheffield Methods Institute; Professor of Urban Economics and Social Statistics, University of Sheffield
- Prof Geoff Meen OBE, Head of School, Professor of Applied Economics, University of Reading

4:00pm - 4:40pm Cities in the Age of Analytics

- Dr Glenn Geers, Technology Director of Infrastructure, Transport and Logistics, National ICT Australia (NICTA); Conjoint Associate Professor, School of Computer Science and Engineering, University of New South Wales

4:40pm - 4:45pm Closing Remarks

Related Publications and Further Reading

Modelling across scales and time: from urban to global, from ancient to modern (Wilson)

- Bevan, A. and Wilson, A. G., 2013. Models of settlement hierarchy based on partial evidence. *Journal of Archaeological Science*, 40 (5), pp. 2415-2427. <http://dx.doi.org/10.1016/j.jas.2012.12.025>
- Davies, T., Fry, H., Wilson, A. G., and Bishop, S.R., 2013 A mathematical model of the London riots and their policing. *Nature Scientific Reports* 3, 1303. doi:10.1038/srep01303
- Davies, T., Fry, H., Wilson, A., Palmisano, A., Altaweel, M. and Radner, K. 2014. Application of an Entropy Maximizing and Dynamics Model for Understanding Settlement Structure: The Khabur Triangle in the Middle Bronze and Iron Ages. *Journal of Archaeological Science* doi:10.1016/j.jas.2013.12.014.
- Wilson, A.G., 2012. *The Science of Cities and Regions: Lectures on Mathematical Model Design*. London: Springer.
- Wilson, A. G. and Dearden, J., 2011. Tracking the evolution of regional DNA: the case of Chicago. In: M. Clarke and J.C.H. Stillwell, eds. *Understanding population trends and processes*. Berlin: Springer, Chp. 1, pp. 209-222.

Urban Big Data Multi-Sectoral Model (Pryce, Meen)

- Chen, Y., Fingleton, B., Pryce, G., Chen, A. & Djordjević, S. (2013) Implications of Rising Flood Risk for Residential Real Estate Prices & the Location of Employment: A GMM Spatial Model with Agglomeration & Endogenous House Price Effects, *Journal of Property Research*, Journal of Property Research, 30 (4). pp. 298-323.[1]
- Fingleton, B. (2008), "Housing supply, housing demand and affordability", *Urban Studies*, 45(8): 1545-1563.
- Meen, G. and J. Li (2014), "Increasing returns and the local spatial distribution of migrant communities: The case of London, 1861-2011", *University of Reading mimeo*.
- Nygaard, C and G. Meen (2013), "The distribution of London residential property prices and the role of spatial lock-in", *Urban Studies*, 50(12): 2535-2552.
- Osland, L. & Pryce, G. (2012) Polycentric Access to Employment with Non-Monotonic Distance Effects, *Housing Studies*, 27(8) 1182-1208.

Cities in the Age of Analytics (Geers)

- NICTA (National ICT Australia) is Australia's Information Communications Technology (ICT) Research Centre of Excellence and the nation's largest organisation dedicated to ICT research. NICTA's primary goal is to pursue high-impact research excellence and, through application of this research, to create national benefit and wealth for Australia.
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