












**GIScience-Colloquium**  
Tuesday 16:15 / Room Y25 H-79

Date	Speaker	Title
07.03.2023	<i>MSc Concept Talk</i> 	<b>Tobias Kuster</b> UZH GIS  Identifying vulturine guineafowl social behaviour from accelerometer data using deep learning approaches
		<b>Chantal Angela Meier</b> UZH GCO  The Image of Zurich - Investigating the Lynchian elements of the "Image of the City" in the City of Zurich
21.03.2023	<i>MSc Concept Talk</i> 	<b>Carmen Pfoster</b> UZH GCO  Energy Poverty in Switzerland? A geospatial analysis.
		<b>Marco Stutz</b> UZH GCO  Geospatial Sentiment Analysis of different Energy Sources using historical Twitter Data
04.04.2023	<i>MSc Concept Talk</i> 	<b>Gregory Biland</b> UZH GIS  Analysis of road traffic accidents between bicycles and motorized private transport in the city of Zurich before and during the COVID-19 lockdown
		<b>Vibiga Vinotharajah</b> UZH GIVA  Cultural Influence on Map Reading: A Difference between Swiss and Tamil People
		<b>Silvia Juen</b> UZH GIVA/GIS  Accessibility evaluation for persons with disabilities: A multicriteria analysis
18.04.2023		<b>Prof. Stephen Fairclough</b> Professor School of Psychology <i>Liverpool John Moores University, UK</i>  Creating Neuroadaptive Interactions with Technology
25.04.2023		<b>Prof. Alison Hepenstall</b> Professor for Geocomputation School of Geography <i>University of Leeds</i>  Simulating social systems with individual-based models: are they worth it?



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Date	Speaker	Title
02.05.2023	 <p><b>Dr. Alina Ristea</b> Assistant Professor Dept of Security and Crime Science- Faculty of Engineering Science <i>University College London, UCL</i></p>	Geospatial crime analysis: From mapping to prediction
09.05.2023	 <p><b>Prof. Krzysztof Janowicz</b> Professor for Cartography and Geoinformation Science at the Faculty of Earth Sciences, Geography and Astronomy <i>University of Vienna</i></p>	Representing Places Bottom-Up and Top-Down
16.05.2023	 <p><b>Prof. Veronica Barassi</b> Professor of Media and Communication Studies, School of Humanities and Social Sciences <i>University of St. Gallen (HSG)</i></p>	AI Futures? Critical Reflections on Algorithmic Profiling, Bias and the Human Error of AI.
30.05.2023	 <p><b>Qi Ying</b> PhD Concept Talk</p>	From Maps in the Head to Maps in the Hand: Towards Familiarity-adaptive Mobile Navigation Systems



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Speaker

Title

18.04.2023



**Prof. Stephen Fairclough**

Professor  
Faculty of Health  
School of Psychology  
*Liverpool John Moores University,*  
*UK*  
[More...](#)

Creating Neuroadaptive Interactions with Technology

**Abstract**

Neuroadaptive Technology is an emergent technology where software adapts intelligently to the psychological state of the user. This closed-loop system works by translating neurophysiological data into intelligent responses at the user interface. This talk will consider how these neuroadaptive interactions are created and designed with examples from past research. The development of this technology faces significant challenges, from ensuring signal quality to creating a repertoire of system responses. Neuroadaptive technology also raises sociotechnical issues, from preservation of human autonomy to data privacy. It is concluded that careful design of the user interface is required to deliver genuine benefits to the user while preserving human freedom and autonomy.

**Bio**

Stephen Fairclough received his PhD from Loughborough University in 2000. He currently is a Professor of Psychophysiology in the School of Natural Sciences and Psychology at Liverpool John Moores University (LJMU). He has been involved in applied psychophysiological and neuroscientific research for over twenty-five years. His main areas of methodological expertise cover EEG, fNIRS and cardiovascular in both laboratory and field settings. He has co-edited two collections on physiological computing and a recent collection on neuroadaptive technology.

**Date: Tuesday, April 18, 2023**

Time: 16:15 – 17:30

Room: Y25 H-79



**GIScience-Colloquium**  
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Date

Speaker

Title

25.04.2023



**Prof. Alison Heppenstall**  
Professor for Geocomputation  
School of Geography  
*University of Leeds*

Simulating social systems with individual-based models: are they worth it?

**Abstract**

Over the past 15 years, the popularity of individual-based modelling approaches (i.e. agent-based modelling and microsimulation) has rapidly grown. This can be attributed to a number of factors including increased computational power, the availability of rich individual-level data and the appearance of development tools. The appeal of these models lies in their ready ability to simulate heterogeneous individuals and their behaviour. However, handling behaviour and calibrating/validating these models remain evergreen challenges. Is the effort that is required to create and evaluate these models worth it? This talk will introduce individual-based models and using a number of examples to walk through the pros and cons of this approach.

**Bio**

Alison Heppenstall is Professor of Geocomputation within the College of Social Sciences at the University of Glasgow, and an Alan Turing Fellow. Prior to joining Glasgow, she was a Professor of Geocomputation in the School of Geography at University of Leeds and an associate of Leeds Institute for Data Analytics (LIDA). She is an expert in the development of spatial agent-based models (ABMs) with a focus on understanding and simulating behavior. Her current interests are concerned with linking ABMs to artificial intelligence and machine learning methodologies, the role of Big Data in creating more robust ABMs, and the application of ABMs to understanding the impact of sustainability policies on health inequalities.


**Date: Tuesday, April 25, 2023**

Time: 16:15 – 17:30

Room: Y25 H-79



**GIScience-Colloquium**  
Tuesday 16:15 / Room Y25 H-79

Date	Speaker	Title
02.05.2023	 <b>Dr. Alina Ristea</b> Assistant Professor Dept of Security and Crime Science Faculty of Engineering Science <i>University College London UCL</i>	Geospatial crime analysis: From mapping to prediction

**Abstract**

Crime occurrences show different patterns in time and space based on their types, the risky environmental and socioeconomic factors and the offenders involved. Various geospatial techniques have been used to better understand crime patterns, the most common being Kernel Density Estimation (KDE) for finding hot areas where crime concentrates. Similarly, KDE is highly used in crime prediction models. This presentation will show examples of using geospatial methods and data for crime mapping, modelling and prediction. It includes data for both micro-level analyses (e.g. household data, street data) and macro-level analyses (e.g. neighbourhoods, cities). Additionally, there will be a discussion on how academic research is used in practice (e.g. for law enforcement and/or for the municipality).

**Bio**

Alina Ristea is a Lecturer in the Department of Security and Crime Science of the University College London (UCL). She has a PhD from the Department of GeoInformatics, University of Salzburg, Austria where she studied crime prediction models using data from social media. She worked as a postdoctoral research fellow for Boston Area Research Initiative (BARI) at Northeastern University, Boston, combining academic research and public policy interests. Alina has multiple international publications and collaborations, and her present interests include geospatial techniques for crime analysis, social media mining, predictive analytics, safety perception, and neighborhood disorder.


**Date: Tuesday, May 2, 2023**

Time: 16:15 – 17:30

Room: Y25 H-79



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Date	Speaker	Title
16.05.2023	 <b>Prof. Veronica Barassi</b> Professor of Media and Communication Studies, School of Humanities and Social Sciences <i>University of St. Gallen (HSG)</i>	AI Futures? Critical Reflections on Algorithmic Profiling, Bias and the Human Error of AI.

### Abstract

The recent debates and research on AI Ethics has shown that AI systems are often shaped by systemic inequalities, by racial biases and by inaccurate and human reductionist analyses of human practices and intentions. Yet we need to ask ourselves what next? What solutions and AI futures are different sections of society envisaging? How are they shaping the debate about the fallacy of AI when it comes to human profiling? To tackle these questions, this talk will draw on the findings of *The Human Error Project: AI, Human-Rights, and the Conflict over Algorithmic Profiling* (2020 - 2023) which investigated how three different sections of society (the media, civil society, and businesses) engage with the ethical challenges of AI and imagine different AI futures.

### Bio

Professor Barassi researches and writes about the impact of data technologies and artificial intelligence on human rights and democracy. She is an anthropologist and Professor in Media and Communication Studies in the School of Humanities and Social Sciences as well as the Chair of Media and Culture in the MCM Institute at the University of St. Gallen. She is the author of different articles and three books, including [Child | Data | Citizen: How Tech Companies are Profiling Us from before Birth](#) with MIT Press (2020). Her Ted Talk on [What Tech Companies know about your Children](#) has reached more than **2 million views**.

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