

## STOR-i ANNUAL CONFERENCE: 8<sup>TH</sup> – 9<sup>TH</sup> JANUARY 2026

### Speaker biographical notes

#### Day 1

##### **Jeremy Bradley, Consulting Data Scientist**

Dr Jeremy Bradley is a Mathematician and Computer Scientist by training, having done his PhD at University of Bristol in stochastic process modelling. He took up a lectureship at Imperial College London in 2004 researching rapid evaluation of massive Markov and semi-Markov models. With greater industrial applicability in mind, he moved to Tesco in 2015 where he helped develop then co-lead the Tesco Data Science group and worked on vehicle routing optimisation for online grocery delivery and, with the help of Rebecca Killick and Jamie-Leigh Chapman, online order forecasting. In 2017 he became Principal Data Scientist at Royal Mail where he helped form the Data Science group there. In both cases he has set up an academic engagement board for the group and works closely with Lancaster/STOR-i and other universities in the UK to advance academic impact in industry. He has just finished as Chief Data Scientist at Datasparq leading a team of experienced AI/DS practitioners in projects involving simulation, optimisation and reinforcement learning in the airline, travel and logistics industries. He is passionate about delivering ethical, valuable, operational data science solutions which are robust and human-enabling.

##### **Jess Spearing – STOR-i Alumni, Shell**

Jess is a statistician with training in Physics and Operational Research. Prior to her role at Shell, she worked on preclinical R&D within the pharmaceutical industry in Basel, Switzerland, before working as a consultant statistician more widely to help companies use statistics for understanding neurodegenerative diseases. Since 2023 she has been working for Shell in Amsterdam, Netherlands. Her role in their Decision Science department focuses on multidisciplinary R&D projects including seismic hazard analysis, gas leak detection and corrosion science.

##### **Jefferson Huang – Naval Postgraduate School**

Jefferson Huang is an Assistant Professor in the Department of Operations Research at the Naval Postgraduate School (NPS). He earned a PhD in Applied Mathematics and Statistics in 2016 from Stony Brook University on the computational complexity of algorithms for Markov decision processes. Prior to joining NPS in 2018, he was a Postdoctoral Associate in the School of Operations Research and Information Engineering at Cornell University. His current research interests include risk-aware Markov decision processes, algorithms for Markov games, maintenance planning for networked infrastructure systems, and logistics in contested environments.

##### **Grazia Speranza – University of Brescia**

M. Grazia Speranza is full professor of Operations Research at the University of Brescia. She was President of the International Federation of Operational Research Societies (IFORS), of the association of European Operational Research Societies (EURO) and of the Transportation Science and Logistics (TSL) society of INFORMS.

Professor Speranza's research is in the area of mixed integer programming and combinatorial optimization, with a focus on applications to transportation and logistics. She is author of more than 200 papers and is cited in the "World's 2% Top Scientists" ranking. She was awarded with the Laurea honoris causa by the University of Freiburg, Switzerland. She is a member of the Academy of Sciences of the University of Bologna and was awarded as an Italian Knowledge Leader by the

Convention Bureau Italia. In 2024 she received the EURO Gold medal and was nominated INFORMS Fellow.

**Kajal Dodhia, STOR-i PhD student**

Kajal is a second year PhD student jointly supervised by Dr Emma Eastoe and Dr Carolina Euan (School of Mathematical Sciences, Lancaster University) and Dr Dafni Sifnioti and Dr Jack Bauchop (EDF UK R&D). Kajal's research focuses on statistical modelling of extreme sea surface temperatures and marine heatwaves. In particular, she is developing methods to identify and characterise extreme sea surface temperatures around the UK. This is important for managing risks to coastal power stations that use seawater as a coolant, providing indicators of climate change, and supporting marine ecosystem preservation.

**Luke Fairley – STOR-i Impact Fellow**

Luke is the current STOR-i Impact Research Associate, whose research focuses on the unification of strategic and operational decision making via mixed-integer linear programming (MILP) and Markov decision processes (MDPs) respectively. His work also incorporates bi-objective optimisation to balance between different decision criteria. Luke recently submitted his PhD thesis, and was supervised by Rob Shone and Peter Jacko at Lancaster University, as well as Jefferson Huang at the Naval Postgraduate School.

**James Gleeson – University of Limerick**

Professor James Gleeson holds a BSc in Mathematical Science and an MSc in Mathematical Physics from University College Dublin. In 1999 he completed his Ph.D. in Applied Mathematics at Caltech. He has lectured at Arizona State University and at University College Cork, and since 2007 has held a Chair in Industrial and Applied Mathematics at the University of Limerick. James' research interests are in the mathematical modelling of stochastic dynamics, with a particular focus on complex systems and networks. James is a former Head of the Department of Mathematics and Statistics at UL, is an associate editor of the Journal of Complex Networks, and has served as a member of the editorial board of Physical Review E and of the Scientific Advisory Board of ISI Foundation Turin. James is Director of the Research Ireland Centre for Research Training in Foundations of Data Science and served as a member of the Irish Epidemiological Modelling Advisory Group that provided mathematical and statistical modelling advice to the National Public Health Emergency Team during the COVID-19 pandemic.

**Jordan Richards – STOR-i Alumni, University of Edinburgh**

Jordan is a Lecturer in Statistics at The University of Edinburgh. He completed his PhD through STOR-i in 2021, before moving to the King Abdullah University of Science and Technology (KAUST) for a 2-year postdoc. His research interests include extreme value theory, spatial statistics, statistical machine learning, and Bayesian data analysis.

**Theodore Kypraios – University of Nottingham**

Theo Kypraios is a Professor of Statistics at the University of Nottingham. His expertise is on the development of novel statistical methodology for Bayesian inference and model assessment for high-dimensional complex data, with a long standing focus on infectious disease modelling. His work is highly interdisciplinary, involving close collaborations with clinicians, epidemiologists, public health agencies, as well as, ecologists, and neuroscientists to address practical problems in a wide range of application areas.

## Day 2

### **Amy Wilson – University of Edinburgh**

Amy Wilson is a lecturer in industrial mathematics with a background in interdisciplinary applied statistics for problems in industry and government as well as the Chair of the Royal Statistical Society Statistics and the Law Section. Applications she has worked on include the modelling of extremes for energy capacity adequacy studies (assessing the risk of shortfalls), uncertainty quantification (including Bayesian emulation) for large scale computer or simulation models and decision-making under uncertainty in legal cases and energy policy. She is particularly interested in applications in statistics and the law and in energy systems.

### **Graham Burgess – STOR-i PhD student**

Graham is approaching the 3rd year of his PhD at STOR-i, supervised by Luke Rhodes-Leader, Rob Shone and Dave Worthington from Lancaster and Dashi Singham from the Naval Postgraduate School, US. His research interests include simulation modelling and simulation optimisation, particularly with applications in the public sector. His PhD focuses on simulation optimisation using multi-fidelity models. Before STOR-i, Graham worked in the Government Operational Research Service.

### **Wanchen Yue – STOR-i PhD student**

Wanchen Yue is a PhD candidate at the STOR-i Centre for Doctoral Training at Lancaster University, working in collaboration with Shell. Her research focuses on statistical modelling of human-induced seismicity, including extreme value methods, measurement-error modelling, and spatio-temporal point processes. Her PhD project is supervised by Prof Jonathan Tawn, Dr Israel Martinez Hernandez from Lancaster University, Dr Zak Varty from Imperial College London and Dr Ross Towe at Shell.

### **Rui-Yang Zhang – STOR-i PhD student**

Rui-Yang Zhang is a 2nd year STOR-i PhD student at Lancaster University. His research focuses on developing probabilistic methods for decision-making under uncertainty using physics-informed machine learning, especially Gaussian processes. His PhD project, conducted in collaboration with ARC TIDE Research Hub, is supervised by David Leslie and Henry Moss at Lancaster, as well as Edward Cripps and Lachlan Astfalck at the University of Western Australia. Before joining Lancaster, he completed a BSc in Mathematics and Statistical Science at University College London and received a Royal Statistical Society award.

### **Marc Goerigk – University of Passau**

Since 2023, Marc Goerigk has held the Chair of Business Decisions and Data Science at the University of Passau in Germany. Previously, he conducted research and taught at TU Kaiserslautern, Lancaster University, and the University of Siegen. He studied mathematics at the University of Göttingen, where he also earned his doctorate in applied mathematics. In 2024, WirtschaftsWoche magazine recognized him as the most prolific business economist under 40.