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2:00 PM to 3:00 PM  
USC – VPD LL101

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## From Behaviour to Data to Models and Back Again: Where Next for Understanding and Predicting Human Decision-Making?

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**Abstract** The mathematical modelling of human decision-making has evolved substantially in recent decades. Novel model structures have been put forward, alternative data sources have been explored, and the methods have gained a foothold in new application areas, notably health and environmental economics. At the same time, our traditional thinking is being challenged by ideas from behavioural economics and mathematical psychology, and important work remains to be done on improving the quality of our forecasts. Developments in one area of application also regularly fail to make the transition into other fields, and the impact of data quality on results is often not discussed. This talk presents a critical view of the reliance on cross-sectional (and often hypothetical) choice data, makes the case for moving beyond treating individual decisions in isolation, and discusses the potential benefits and pitfalls of moving away from models grounded in economic theory.

**Stephane Hess**, is Professor of Choice Modelling in the Institute for Transport Studies and Director of the Choice Modelling Centre at the University of Leeds. He is also Honorary Professor in Choice Modelling in the Institute for Transport and Logistics Studies at the University of Sydney and has a director position at RSG, a leading North American consultancy company, the founding editor in chief of the Journal of Choice Modelling and the founder and steering committee chair of the International Choice Modelling Conference. He is an associate editor of Transportation Research Part E, and serves on the editorial advisory board of two other leading journals, Transportation Research Part B and Transportation, as well as academic committees at leading international conferences.