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UNCERTAINTY AND RISK: SIMULATION, STOCHASTICS AND STATISTICS

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ABSTRACT

Simulation has become the critical tool in understanding uncertainty in a wide range of disciplines. In this talk, we will discuss how simulation is influencing both stochastics and statistics, and also discuss insights for the simulation modeler that derive from these methodological areas. We will also talk about how the interactions between simulation, stochastics, and statistics are changing in light of advances in machine learning, increasing data volumes, and the growing availability of inexpensive parallel computing platforms.

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PETER W. GLYNN is the Thomas Ford Professor in the Department of Management Science and Engineering at Stanford University. He is a Fellow of INFORMS and of the Institute of Mathematical Statistics, has been co-winner of Best Publication Awards from the INFORMS Simulation Society in1993, 2008, and 2016, and was the co-winner of the John von Neumann Theory Prize from INFORMS in 2010. In 2012, he was elected to the National Academy of Engineering. His research interests lie in stochastic simulation, queueing theory, and statistical inference for stochastic processes.