

# EPSTEIN INSTITUTE SEMINAR ▪ ISE 651

## Persistent Issues in Stochastic Optimization/Programming - A Disconnect!

ABSTRACT - There are several recurring themes which persist in Stochastic Optimization/Programming S(O/P). These include: a) What is meant by convergence especially in cases when the scale of uncertainty far exceeds computational capabilities? b) What kind of stopping rules should we adopt, and how do we recommend decisions? c) When should we go beyond first-order methods? d) How should one validate results? These issues appear to take a backseat while discussing the successes of Stochastic Optimization/Programming. However, these issues point to research directions which can lead to greater dependability of decisions under uncertainty.



**Dr. Suvrajeet Sen**

Professor

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**SPEAKER BIO** – Suvrajeet Sen is Professor at the Daniel J. Epstein Department of Industrial and Systems Engineering at the University of Southern California. Prior to joining USC, he was a Professor at Ohio State University (2006-2012), and University of Arizona (1982-2006). He has also served as the Program Director of OR as well as Service Enterprise Systems at the National Science Foundation. Professor Sen’s research is devoted to many categories of optimization models, and he has published over one hundred papers, with the vast majority of them dealing with models, algorithms and applications of Stochastic Programming problems. He has served on several editorial boards, including Operations Research as Area Editor for Optimization and as Associate Editor for INFORMS Journal on Computing, Journal of Telecommunications Systems, Mathematical Programming B, and Operations Research. He also serves as an Advisory Editor for several newer journals. Professor Sen was instrumental in founding the INFORMS Optimization Society in 1995, and recently served as its Chair (2015-2016). Except for his years at NSF, he has received continuous extramural research funding from NSF and other basic research agencies, totaling over ten million dollars as PI over his career. He and his colleagues were jointly recognized by the INFORMS Computing Society Award in 2015 for “seminal work” on Stochastic Mixed-Integer Programming. Professor Sen is also a Fellow of INFORMS.

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**TUESDAY, MARCH 16, 2021**

**3:30 PM – 4:50 PM**

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