

## *Computing Bounds and Confidence Intervals for Stochastic Programs*

ABSTRACT - mpi-sppy  
(<https://github.com/Pyomo/mpi-sppy>) is a software package to allow for optimization of Pyomo optimization models uncertainty. In this talk we will overview design and performance considerations related to bounds and confidence intervals. Particular attention will be paid to issues associated with problems that have more than two stages and scenarios that do not exhibit stage-wise independence.



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**SPEAKER BIO** – David Woodruff earned his Ph.D. in Industrial Engineering and Management Sciences from Northwestern University. His current research primarily concerns computational aspects of optimization under uncertainty. His research includes solution algorithms, problem representation and modeling language support. He has worked on applications in operations, logistics, science, and has been involved recently in a number of applications in electrical energy planning and scheduling. He is one of the developers of Pyomo, ([www.pyomo.org](http://www.pyomo.org)) that won the INFORMS Computing Society prize in 2019 and an R&D 100 award in 2016.