

Industrial and Systems Engineering Seminar

Accounting for Arrival-Rate Uncertainty in Call-Center Scheduling

Wednesday, November 19

3:15 PM – Refreshments before the Seminar

3:30 PM – Graduate Seminar

Mechanical Engineering Room 4125 A & B



Noah Gans

Professor

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We develop and test an integrated forecasting and stochastic programming approach to workforce management in call centers. We first demonstrate that parametric forecasts can be used to drive stochastic programs whose results are stable with relatively small numbers of scenarios. We then extend our approach to include forecast updates and two-stage stochastic programs and test the performance of these schemes using two large sets of call-center data.

Joint work with: Haipeng Shen, Yong-Pin Zhou, Nikolay Korolev, Alan McCord, Herbert Ristock

BIO: Noah Gans is the Anheuser-Busch Professor of Management Science at the Wharton school of the University of Pennsylvania. His research focuses on service operations, and he has a particular interest in the management of contact centers. He is the Department Editor for Stochastic Models and Simulation at *Management Science*. In 2010-2011, he was the President of INFORMS's Manufacturing and Service Operations Management Society. At Wharton, Noah teaches an MBA core course on Business Analytics, an MBA elective course on Service Operations, and a Ph.D. course in Operations Management.