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Title: **The Stochastic Eulerian Tour Problem –
Properties and Heuristics**
Date: **November 9, 2005 (Wed)**
Time: **11:00 am**
Place: **Goldwater Center GWC 510**

Abstract:

This presentation defines the Stochastic Eulerian Tour Problem (SETP) and investigates several characteristics of the problem. Given an undirected graph and a subset of edges that require service according to a given probability distribution, the SETP seeks an Eulerian tour of minimum expected length. We show that the SETP is NP-hard and derive a closed form expression for the expected length of a given Eulerian tour when the number of edges requiring services follows a binomial distribution. We present three heuristics and computational results based on Euclidean and grid networks.

Bio:

Srimathy Mohan is an assistant professor of Operations Management in the School of Global Management and Leadership at the Arizona State University. Her degrees and research training are in the fields of Industrial Engineering and Operations Research / Operations Management. Her research interests are in applying quantitative modeling techniques to solving real world problems. She has worked with several industries in an effort to incorporate existing and new research ideas into their decision making processes.