



Operations Research Seminar

Resource Allocation Strategies for Reliability of Complex Systems

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When modeling the reliability of complex systems, many different data sources, from full-system tests to component testset measures to accelerated test data, can be utilized to improve system and component reliability estimates. While much of the previous work has focused on developing a working model for existing data, this talk considers how to select between different data allotments for optimizing system reliability precision in the future. A metric to quantify good performance of future analyses is specified. Using this metric, the strategies for determining which data should be collected are dependent on current data available, the reliability of individual components and the relative cost of new data sources. A simple example will illustrate the approach.

Date: Tuesday, March 3, 2009

Time: 15:00-16:00

Location: GL-115