



NSF-Duke-NCSU-UNC

Joint MUMS Program Transition - SPUQ Workshop

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SPEAKER/ABSTRACT

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“Stochastic Simulators: Issues, Methods, Unresolved Questions”

Abstract:

Stochastic computer models, wherein reruns of the code with the exact same inputs does not yield the exact same output, are becoming increasingly commonplace. Effective statistical analysis of such output can be more challenging and more crucial than the statistical analysis of deterministic computer models. Even so, stochastic simulation is currently subject to less statistical research focus.

This talk will outline a review we have been working on, in which we aim to spur additional research on the topic “introducing the objectives; outlining what statistical models currently exist; discussing how one can efficiently use such models to answer key questions about a stochastic computer model, and explaining what challenges currently still exist.