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Joint MUMS Program Transition - SPUQ Workshop

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SPEAKER/ABSTRACT

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“Some Pieces of Exascale Uncertainty Quantification”

Abstract:

Exascale computing is coming to the Department of Energy. The new prefix brings some new challenges. Raw computing power will overwhelm the I/O capability of these machines. This is a particular difficulty for the practice of statistical uncertainty quantification (UQ) which relies on ensembles of simulations, each of which will necessarily be only partially available. This talk will present two separate piece of work that may be useful parts of the exascale UQ workflow. The first part of the talk will cover in situ analysis of simulations in order to summarize simulations as they are running. The second part of the talk will cover statistical emulation with incomplete data.