



NSF-Duke-NCSU-UNC

Joint MUMS Program Transition - SPUQ Workshop

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SPEAKER/ABSTRACT

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“Bayesian CUSP Catastrophe Model for Sudden Changes”

Abstract:

While accurately accessing the storm surge risk is crucial for coastal regions, the limited observational records of storms prevents traditional data--based statistical approaches. The common practice involves running hydrodynamics simulation where each run simulates the storm surge response with respect to a hurricane scenario, which is parameterized by a set of storm characteristics. One of the key components for surge risk assessment is the estimation of the distribution of the storm characteristics (input). In this talk I will present our working group's effort on addressing this critical but often overlooked issue.