NIMBioS
National Institute for Mathematical and Biological Synthesis

Uncertainty Quantification for Biological Models
A NIMBioS Tutorial

June 26-28, 2017
NIMBioS at the Univ. of Tennessee, Knoxville

This tutorial will focus on uncertainty quantification in mathematical models in the life sciences and will provide researchers with the basic concepts, theory, and algorithms necessary to quantify input and response uncertainties and to perform sensitivity analysis for simulation models. Concepts to be covered may include: probability and statistics, parameter selection techniques, frequentist and Bayesian model calibration, propagation of uncertainties, quantification of model discrepancy, adaptive surrogate model construction, high-dimensional approximation, random sampling and sparse grids, as well as local and global sensitivity analysis. This tutorial is intended for graduate students, postdocs and researchers in mathematics, statistics, computer science and biology.

Participation in the tutorial is by application only. Successful applicants will be notified within two weeks of the application deadline. If needed, financial support for travel, meals, and lodging is available for tutorial attendees.

Application deadline: March 1, 2017

For more information about the tutorial and a link to the online application form, go to
http://www.nimbios.org/tutorials/uncertainty

THE UNIVERSITY OF TENNESSEE KNOXVILLE

NSF