NUMERICAL ANALYSIS AND SCIENTIFIC COMPUTING SEMINAR

Uncertainty Quantification and Numerical Analysis: Interactions and Synergies

Daniela Calvetti Case Western Reserve University

Abstract: The computational costs of uncertainty quantification can be challenging, in particular when the problems are large or real time solutions are needed. Numerical methods appropriately modified can turn into powerful and efficient tools for uncertainty quantification. Conversely, state-of-the-art numerical algorithms reinterpreted from the perspective of uncertainty quantification can becomes much more powerful. This presentation will highlight the natural connections between numerical analysis and uncertainty quantification and illustrate the advantages of re-framing classical numerical analysis in a probabilistic setting.

Friday, February 24, 2017, 1:00 pm Mathematics and Science Center: W301

MATHEMATICS AND COMPUTER SCIENCE EMORY UNIVERSITY