

IMA Hot Topics Workshop

Uncertainty Quantification in Materials Modeling

Open Seminar session, Friday July 31, Armstrong Hall of Engineering



Organizers	
Mark Benedict	US Air Force Research Laboratory
Andrea Browning	The Boeing Company
Stephen Christensen	The Boeing Company
Andrew Dienstfrey	National Institute of Standards and Technology
Paul Patrone	University of Minnesota, Twin Cities
Frederick Phelan	National Institute of Standards and Technology
Alejandro Strachan	Purdue University

Friday, July 31, 2015, ARMS Room 1010

8:30-9:10AM	State of the Art and Recent Progress in Uncertainty Quantification for Electronic Systems (i.e., Variation-Aware or Stochastic Simulation)	Luca Daniel (Massachusetts Institute of Technology)
9:10-9:50AM	Optimal Filters for High-Speed Compressive Detection in Spectroscopy	Greg Buzzard (Purdue University)
9:50-10:30AM	Quantifying the Influence of Conformational Uncertainty in Biomolecular Solvation Using a L1 Minimization with Basis Rotation Algorithm	Guang Lin (Purdue University)
10:30-10:45AM	Break	
10:45-11:00AM	Lecture	Daniel Pantuso (Intel Corporation)
11:00-11:15AM	Pertinent and Exciting Uncertainty Quantification Problem Spaces in Materials and Manufacturing	Amanda Criner (US Air Force Research Laboratory)
11:15-11:30AM	Sensitivity Analysis of Multiscale Reaction Networks With Stochastic Averaging	Araz Hashemi (University of Delaware)
11:30-11:45AM	Uncertainty Quantification in Glass Properties Prediction	Adam Tandia (Corning Incorporated)
11:45-12:00PM	Uncertainty in Composite Material Development	Matthew Jackson (Cytec)
12:00-12:15PM	Lecture	Samuel Tucker (Boeing Company)
12:15-12:30PM	Closing Remarks	