March 6–8, 2018

Integrating Machine Learning and Predictive Simulation: From Uncertainty Quantification to Digital Twins

DESCRIPTION
This workshop explores the synergy between the worlds of physics-based simulations and machine learning, creating a forum for experts and scientists from industry and academia. Among the topics addressed in the workshop are uncertainty quantification, surrogate-based optimization, and digital twins, which integrate simulation models and machine learning with data to create living digital simulation models that update and change as their physical counterparts change.

ORGANIZERS
Dirk Hartmann, Siemens
Yannis Kevrekidis, Johns Hopkins University
Markus Reiterer, Medtronic, PLC
Laurent White, ExxonMobil Research and Engineering
Karen Willcox, Massachusetts Institute of Technology

SPEAKERS INCLUDE
Karthik Duraisamy, University of Michigan
Garrett Goh, Pacific Northwest National Laboratory
Benyamin Grosman, Medtronic
Lior Horesh, IBM
Drew Pruett, University of Mississippi
Tuhin Sahai, United Technologies Corporation
Herman van der Auweraer, Siemens
Joe Walsh, ASSESS Initiative
Karen Willcox, Massachusetts Institute of Technology

More information is available at www.ima.umn.edu/2017-2018/SW3.6-8.18