Professor Sankaran Mahadevan (Vanderbilt University, Nashville, TN, USA) has more than thirty years of research and teaching experience in uncertainty quantification, risk and reliability analysis, machine learning, structural health diagnosis and prognosis, and decision-making under uncertainty. He has applied these methods to a variety of structures, materials and systems in civil, mechanical and aerospace engineering. His research has been extensively funded by NSF, NASA, DOE, DOD, FAA, NIST, as well as GM, Chrysler, GE, Union Pacific, ABS, and Mitsubishi, and he has co-authored two textbooks and 300 peer-reviewed journal papers. During the past decade, he has been at the forefront of academic research on digital twin methodologies for aircraft, rotorcraft, ship structures, and additive manufacturing, funded by FAA, NASA, U.S. Air Force, U. S. Army, NIST, and ABS. Professor Mahadevan is currently President of the Engineering Mechanics Institute, Managing Editor of the ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, and has served as General Chair of several prominent conferences in AIAA, ASCE, and the Prognostics & Health Management (PHM) Society. He is a Fellow of AIAA, Engineering Mechanics Institute (ASCE), and PHM Society.