

Karen E. Willcox – University of Texas at Austin, USA

Talk title	Toward predictive digital twins: Component-based adaptive reduced-order models and interpretable machine learning
Biography	<p>Karen E. Willcox is Director of the Oden Institute for Computational Engineering and Sciences, a Professor of Aerospace Engineering and Engineering Mechanics at the University of Texas at Austin, and External Professor at the Santa Fe Institute. At UT, she holds the W. A. “Tex” Moncrief, Jr. Chair in Simulation-Based Engineering and Sciences and the Peter O'Donnell, Jr. Centennial Chair in Computing Systems. Before joining the Oden Institute in 2018, she spent 17 years as a professor at the Massachusetts Institute of Technology, where she served as the founding Co-Director of the MIT Center for Computational Engineering and the Associate Head of the MIT Department of Aeronautics and Astronautics. Prior to joining the MIT faculty, she worked at Boeing Phantom Works with the Blended-Wing-Body aircraft design group. She is a Fellow of the Society for Industrial and Applied Mathematics (SIAM), a Fellow of the American Institute of Aeronautics and Astronautics (AIAA), and in 2017 was appointed Member of the New Zealand Order of Merit (MNZM). Webpage: https://kiwi.oden.utexas.edu/</p>