Peridynamics and its Applications

Peridynamics, a nonlocal approach, enables the solution of complex field equations in the presence of abrupt change in behavior, jump discontinuities or singularities, nonlinearity, and multi-scale resolution arising from characteristic parameters. This presentation will demonstrate the applicability of peridynamics for the solution of many fundamental and engineering problems, as well as failure prediction in structural materials under complex loading conditions.

Bio:
Erdogan Madenci received his PhD in mechanical engineering 1987 from UCLA, and joined the University of Arizona in 1989. His research interests are in the area of computational mechanics and failure prediction in materials. He is a Fellow of ASME and an Associate Fellow of AIAA.

AME Lecture Hall, Room S212
Thursday, Sept. 7, 2017
4 p.m.
Refreshments and socializing 3:45 p.m. at the east end of the AME Courtyard