Guest Speaker: Curtis Holliman
The Catholic University of America

Date: Tuesday, April 6, 2021
Time: 11:00 AM
Location: Zoom

Lecture Title:
Instability properties for water wave models with higher order nonlinearities

Abstract
We consider generalizations of the Camassa-Holm equation that maintain the property of having multi-peakon solutions. We use the peakon collisions of these solutions to examine the effect the order of the nonlinearity has on the properties of ill-posedness of the equation. In particular, we observe a relationship between the order of the nonlinearity and the threshold of the Sobolev index in which the data-to-solution map exhibits norm-inflation vs. nonunique solutions.