

Department of Mathematics and Statistics

Colloquium Series



Motivated by rogue ocean waves: Theoretical results for the Dysthe equation

Kristin Kurianski CSU Fullerton

Abstract: Rogue ocean waves are rare, exceptionally large waves that can appear unpredictably, causing damage to ships and naval structures. Governing equations from fluid dynamics have been used in attempts to model and perhaps predict when these waves might occur. Two such equations used to study this phenomenon are the cubic nonlinear Schrödinger equation and the Dysthe equation. This talk focuses on theoretical results related to these equations and provides motivation for seeking to better understand solution behavior.

Keywords: rogue waves, dispersive partial differential equations

Mon. Nov. 22, 1:05 – 1:50 pm on Zoom

For more info visit the department website for the colloquium

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