Department of Mathematics
University of Notre Dame

PDE, COMPLEX ANALYSIS AND DIFFERENTIAL GEOMETRY SEMINAR

Guest Speaker: Gerson Petronilho
Federal University of São Carlos

Date: Thursday, June 8, 2023
Time: 11:00 AM
Location: 258 Hurley Hall
Zoom URL: NA

Lecture Title:

On dispersive Camassa-Holm equations with analytic initial data

Abstract

We consider the Cauchy problem of dispersive Camassa-Holm type equations with analytic initial data and study their local well-posedness in analytic Bourgain spaces. Then, using the fact that their solutions conserve their H^1-norm, an almost conservation law is derived and is used to prove lower bound estimates for their radius of spatial analyticity. This is joint work with Alex Himonas.

Gerson Petronilho - Federal University of São Carlos