

PDE, COMPLEX ANALYSIS AND DIFFERENTIAL GEOMETRY SEMINAR

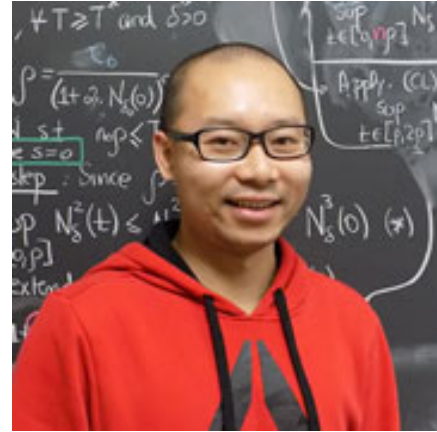
Guest Speaker: Fangchi Yan
West Virginia University

Date: Thursday, July 8, 2021

Time: 3:00 PM

Location: Zoom

Zoom URL: notredame.zoom.us/j/96364121213



Lecture Title:

Initial-boundary value problems for the Korteweg-de Vries equation

Abstract

In this talk we shall discuss initial-boundary value problems for the Korteweg-de Vries equation on the half-line and the interval. First, we will derive the Fokas solution formulas for the corresponding forced linear problems. Then we will explain how these formulas are used to derive linear estimates. Finally, we will describe some well-posedness results for the nonlinear problems. These are from the work of Fokas-Himonas-Mantzavinos and Himonas-Mantzavinos-Yan.