



PURDUE UNIVERSITY

Outstanding Alumnus Colloquium Lecture

Speaker: Professor Alex Himonas, University of Notre Dame
Title: “Optimal Dependence of Solutions on Initial Data for CH and the Euler Equations”
Date: Thursday, September 24, 2009
Time: 4:30 P.M.
Place: BRNG 1230

Abstract

We shall discuss the Cauchy problems for the Camassa-Holm (CH) and the Euler equations. More precisely, we shall prove that the data-to-solution map for these equations is not uniformly continuous in Sobolev spaces for any exponent greater than the well-posedness index. Considering the fact that these equations are well-posed with continuous dependence on initial data, our results make this dependence optimal. This talk is based on work with Carlos Kenig and Gerard Misiolek.

Refreshments will be served in the Math Library Lounge at 4:00 p.m.