Temple University Mathematics Colloquium

Barbara Keyfitz

The Ohio State University

will speak on

Linear and Nonlinear Waves in Gas Dynamics

ABSTRACT: This talk explores some puzzles of multidimensional conservation laws (quasilinear hyperbolic partial differential equations) by looking at two types of characteristic families in a model system: the Euler equations of compressible fluid flow. There is as yet no existence theory for such systems, and a considerable amount of recent activity raises questions of whether these equations, and others like them, are even well-posed. The classical theory of characteristics provides a framework that unifies some observations, and suggestions directions for further study.

Monday, November 2, 2015
Lecture at 4:00 pm
Coffee, tea, and refreshments from 3:40 pm
Room 617, Wachman Hall
Department of Mathematics