

## Seminar Series in Applied Mathematics

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Professor David Sattinger

Department of Mathematics and Statistics, Utah State University

*Solvable models of nonlinear dispersive waves*

Monday, April 9, 2001

3:15 pm

Pierce 116

*Abstract:*

We give a survey of the role of the KdV equation in modeling nonlinear waves in fluids and plasma. In particular, we discuss the history of the solitary wave, and the role of the 2-soliton solution in modeling the interaction of solitary waves in plasma. We also discuss the Camassa-Holm equation, and the use of classical formulas of T.J. Stieltjes to solve the inverse scattering problem for the multipeakon solutions.

*Refreshments will be available starting at 3:00pm.*

*For additional information contact Yi Li (216-5433) or Patrick Miller (216-5452).*

*Directions to Stevens are available through our web site: <http://attila.stevens-tech.edu/math/>.*

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