1057-35-250   **Jerry L Bona**, IL, **Hongqiu Chen*** (`hchen1@memphis.edu`), Department of Mathematical Sciences, University of Memphis, Memphis, TN 38152, and **Ohannes A Karakashian**.
Solitary-wave Solutions of a System of Nonlinear Dispersive Wave Equations. Preliminary report.

Considered here is a system of nonlinear, dispersive wave equations of the form

$$\begin{cases} u_t + u_{xxx} + (Au^2 + Buv + Cv^2)_x = 0, \\ v_t + v_{xxx} + (Du^2 + Euv + Fv^2)_x = 0 \end{cases}$$

recently derived by Bona, Cohen and Wang, where $A, B, \cdots, F$ are real constants. This talk is concerned with explicit solitary-wave solutions and their stability. (Received January 24, 2010)