1086-35-2545 Hongqiu Chen* (hchen1@memphis.edu), Department of Mathematical Sciences, University of Memphis, Memphis, TN 38152. Initial-boundary value problem for coupled dispersive equations.
Considered here are systems of equations of BBM type, viz.

$$\begin{cases} \partial_t u + u_x - \partial_{xxt} u + \partial_x (Au^2 + Buv + Cv^2) = 0, \\ \partial_t v + v_x - \partial_{xxt} v + \partial_x (Du^2 + Euv + Fv^2) = 0 \end{cases}$$

where u = u(x,t) and v = v(x,t) are real valued functions for $x \in I, t \ge 0$, where $I \subset \mathbb{R}$ can be bounded interval, half line and \mathbb{R} itself, (of course with appropriate initial-boundary conditions), A, B, \dots, F are real constants. Theory regarding well-posedness in this case is a little more subtle than in the case of a single equation. (Received September 25, 2012)