1030-35-60   **Mohammad A. Rammaha*** (`mrammaha1@math.unl.edu`), Department of Mathematics, University of Nebraska-Lincoln, Lincoln, NE 68588-0130, and **Sawanya Sakuntasathien** (`s-ssakunt1@math.unl.edu`), Department of Mathematics, University of Nebraska-Lincoln, Lincoln, NE 68588-0130. *Systems of nonlinear wave equations with nonlinear degenerate damping and source terms.*

In this talk we consider systems of wave equations where one of the nonlinearities act as a dissipative term (which can be degenerate) and the other acts as a strong source. Under some conditions on the parameters in the system we obtain several results on the existence of local and global solutions, uniqueness, and blow up of solutions. (Received July 12, 2007)