Dan Andrei Geba\* (dangeba@math.berkeley.edu), Department of Mathematics, University of California, Berkeley, Evans Hall, Room 970, Berkeley, CA 94720-3840. New questions in nonlinear wave equations.

We will present the state of the art of some problems related to the local well-posedness theory of the nonlinear wave equations and show a set of new directions in this field. This is in part joint work with Daniel Tataru. (Received August 15, 2005)