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Catherine Lebiedzik* (kate@math.wayne.edu), Department of Mathematics, Wayne State University, 656 W Kirby, Detroit, MI 48201. *Hadamard Wellposedness for a Class of Nonlinear Shallow Shell Problems.*

This paper is concerned with the nonlinear shallow shell model introduced in 1966 by W. T. Koiter and later studied by M. Bernadou and J. Oden. We consider a dynamic version of this model which is based upon the intrinsic shell modeling techniques introduced by Michael Delfour and Jean-Paul Zolésio. We show existence and uniqueness of both regular and weak solutions to the dynamical model, and that the solutions are continuous with respect to the initial data. (Received August 31, 2005)