Finite Element Approximation of Prestressed Shells

Ismail Merabet[1] Serge Nicaise[2]

This work deals with the finite element approximation of a prestressed shell model. Contrary to the other known shell models, like Koiter's, Naghdi's, Budiansky–Sanders . . . , the considered model is not necessary positive and the prestressed term is predominate. In addition to existence and uniqueness results of solutions of the continuous and discrete problems we derive some a priori error estimates. Numerical tests are given that validate and illustrate our approach.

References:

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[1]Kasdi Merbah University Ouargla Algeria
merabetsmail@gmail.com

[2]Université de Valenciennes
serge.nicaise@univ-valenciennes.fr