

Analysis and Applied Mathematics Seminar

Approximation of the solution of an obstacle problem for shallow shells via the Finite Element Method

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Abstract: In this talk we discuss the convergence of a numerical scheme, based on the Finite Element Method, via which the solution of an obstacle problem for linearly elastic shallow shells is approximated. For doing so, one needs to establish an augmentation of regularity result for the solution of the problem under consideration. Since the solution is expressed in the form of a vector field, the method proposed by Brezis & Stampacchia appears not to be applicable, and a different approach is thus demanded.

This is joint work with Xiaoqin Shen (Xi'an University of Technology, China).

Monday, February 7 at 4:00 PM in Zoom