



A posteriori error analysis for finite element solutions of a frictional contact problem

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Abstract

In this paper, we derive and analyze a residual type a posteriori error estimator for finite element approximations of a frictional contact problem for linearized elastic materials. The reliability of the estimator is rigorously shown. The efficiency of the estimator is also studied. Results from several numerical examples are reported, illustrating the good performance of the estimator in adaptive solution of the frictional contact problem.