

C^0 INTERIOR PENALTY METHODS FOR FOURTH ORDER ELLIPTIC VARIATIONAL INEQUALITIES

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ABSTRACT

We will present theoretical and numerical results for C^0 interior penalty methods for fourth order elliptic variational inequalities, with applications to plate obstacle problems and elliptic optimal control problems with pointwise state constraints. Both *a priori* and *a posteriori* error analyses will be discussed. This is joint work with Joscha Gedicke, Li-yeng Sung, Yi Zhang and Hongchao Zhang.

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