# Optimal Control in 3D Non-Convex Domains

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Solutions of partial differential equations in non-convex domains can have corner and edge singularities. The talk shows the influence on the rate of convergence for a simple optimal control problem. A finite element method with a piecewise linear approximation of the state and a piecewise constant approximation of the control is used. Results on quasi uniform and a-priori graded meshes are shown.

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