

Optimal Dirichlet boundary control for the Navier–Stokes equations

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We consider an optimal Dirichlet boundary control problem for the Navier–Stokes equations. The control is considered in the energy space, where the related norm is realized by the so called Steklov–Poincaré operator. Further we introduce a stabilized finite element method for the optimal control problem, where we especially focus on lowest order elements. Finally, we present some numerical results.

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