**Mika Juntunen, Rolf Stenberg**: *Nitsches Method for General Boundary Conditions*; Helsinki University of Technology, Institute of Mathematics, Research Reports A530 (2007).

**Abstract:** *We introduce a method for treating general boundary conditions in the finite element method generalizing an approach, due to Nitsche (1971), for approximating Dirichlet boundary conditions. We use Poisson's equations as a model problem and prove a priori and a posteriori error estimates. The method is also compared with the traditional Galerkin method. The theoretical results are verified numerically.*

**AMS subject classifications:** 65N30

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