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**The treatment of nonhomogeneous Dirichlet boundary conditions by the p- version of the finite element method.** (English) Zbl 0673.65066

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This paper forms a part of the study of the authors on the question of imposing nonhomogeneous essential boundary conditions of Dirichlet type in the finite element analysis of a two dimensional problem. Here the problem of implementation in the p-version of the finite element method is considered and optimal error estimates are obtained.

Reviewer: V.Subba-Rao

**MSC:**

**65N30** Finite element, Rayleigh-Ritz and Galerkin methods for boundary value problems involving PDEs  
**35J25** Boundary value problems for second-order elliptic equations

Cited in 14 Documents

**Keywords:**

nonhomogeneous Dirichlet boundary conditions; finite element; p-version; optimal error estimates

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