Schötzau, Dominik; **Schwab, Christoph**; **Toselli, Andrea**
Mixed hp-DGFEM for incompressible flows. (English) Zbl 1055.76032
SIAM J. Numer. Anal. 40, No. 6, 2171-2194 (2003).

An abstract framework is developed for several mixed discontinuous Galerkin (DG) approximations of Stokes problem. Within this framework, a priori error estimates for *hp*-approximations on tensor product meshes are derived, and a new stability estimate for discrete bilinear form is given.

Reviewer: Thomas Sonar (Braunschweig)

MSC:

76M10	Finite element methods applied to problems in fluid mechanics
76D07	Stokes and related (Oseen, etc.) flows
65N12	Stability and convergence of numerical methods for boundary value problems involving PDEs

Keywords:

nuerical stability

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