

1057-65-158

Juping Wang, Yanqiu Wang and **Xiu Ye*** (xxye@ualr.edu), 2801 S. university Ave.,
University of Arkansas, Little Rock, AR 72204. *A Posterior error estimate for the Stokes
equations.* Preliminary report.

We establish a posterior error analysis for solving the Stokes equations by finite element methods. This residual estimator can be applied to almost all the existing finite element methods including conforming, nonconforming and discontinuous finite elements. (Received January 20, 2010)