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A posteriori error analysis of an HDG method for the Oseen problem

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Abstract

In this talk, we will introduce and analyze an *a posteriori* error estimator for a hybridizable discontinuous Galerkin method applied to the gradient-velocity-pressure formulation of the Oseen problem. We establish reliability and local efficiency results of our estimator for the L^2-error of the velocity gradient and the pressure and the H^1-error of the velocity. Finally, we provide some numerical experiments showing the quality of our adaptive scheme.

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