## Convergence of Adaptive Conforming and Nonconforming Finite Element Methods for the Perturbed Stokes Equation

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In this talk, we shall present some advance on the adaptive theory of the Stokes-like problem. In particular, we prove that the convergence and optimality of the adptive(conforming or nonconforming) finite element methods under the condition that the divergence vanishes for the functions in the discrete kernel space.