A polynomial-degree-robust equilibrated estimator for the curl-curl problem

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Abstract

I will present the construction of an a posteriori error estimator for the curl-curl problem based on flux equilibration. I will start by briefly recalling how this (now standard) procedure can be applied to the simpler setting of the Poisson problem. I will then show that a severe obstruction occurs to adapt the procedure for the curl-curl problem, and present a new technique to overcome this difficult. The robustness of the estimator with respect to the polynomial degree will also be discussed.

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