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Demkowicz, L.; Gopalakrishnan, J.

Analysis of the DPG method for the Poisson equation

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Keywords: Poisson equation; Discontinuous Petrov Galerkin (DPG) method

Review text:

The authors present an analysis of a discontinuous Petrov Galerkin (DPG) method for the Poisson equation. The purpose of the present contribution is to provide new techniques in order to analyse DPG in higher space dimensions. The authors first recall with a salient abstract for the DPG method and then they developed bilinear and linear forms that constitute the PDG method. An analysis for the error of the method is presented and how the analysis provided in the present paper can be extended to more general second order elliptic equation is sketched.

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