A BRIEF REPORT ON THE ARTICLE "ANALYSIS OF THE DPG METHOD FOR THE POISSON EQUATION"

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ABSTRACT. 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.

Last update: Thursday 8th March, 2012. My hope I come back to the under review to learn more.

1. Some basic knowledge

- 1. some literature on the subject [3, 4, 5, 6]
- 2. the present work is an extension for [3, 4, 5, 6]
- 3. except the reference [3], the works [4, 5, 6] are treating the one dimension case

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