

## Accepted Manuscript

A new continuous/discontinuous formulation for Stokes problem with analysis of InfSup stability

E.G. Dutra do Carmo, K.P. Fernandes, W.J. Mansur, A.R. Corbo

PII: S0045-7825(17)30759-4  
DOI: <https://doi.org/10.1016/j.cma.2017.12.007>  
Reference: CMA 11699

To appear in: *Comput. Methods Appl. Mech. Engrg.*

Received date: 27 March 2017  
Revised date: 26 October 2017  
Accepted date: 4 December 2017

Please cite this article as: E.G. Dutra do Carmo, K.P. Fernandes, W.J. Mansur, A.R. Corbo, A new continuous/discontinuous formulation for Stokes problem with analysis of InfSup stability, *Comput. Methods Appl. Mech. Engrg.* (2017), <https://doi.org/10.1016/j.cma.2017.12.007>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



- 1- A new Discontinuous / Continuous formulation for Stokes problem is presented
- 2- The new method permits full static condensation at element level for pressure
- 3- The convergence rates are optimal for interpolations  $(P_{k+1}, P_k)$  and  $(Q_{k+1}, Q_k)$  ( $k \geq 1$ )
- 4- The degree of interpolation of the pressure can be arbitrary
- 5- It has the lowest global system compared to all methods

Download English Version:

<https://daneshyari.com/en/article/6915667>

Download Persian Version:

<https://daneshyari.com/article/6915667>

[Daneshyari.com](https://daneshyari.com)