## **Accepted Manuscript**

a posteriori limiting for 2D Lagrange plus Remap schemes solving the hydrodynamics system of equations

Jean-Philippe Braeunig, Raphaël Loubère, Renaud Motte, Mathieu Peybernes, Raphaël Poncet

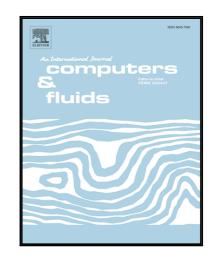
PII: S0045-7930(17)30292-X

DOI: 10.1016/j.compfluid.2017.08.020

Reference: CAF 3575

To appear in: Computers and Fluids

Received date: 28 February 2017
Revised date: 1 July 2017
Accepted date: 7 August 2017



Please cite this article as: Jean-Philippe Braeunig, Raphaël Loubère, Renaud Motte, Mathieu Peybernes, Raphaël Poncet, a posteriori limiting for 2D Lagrange plus Remap schemes solving the hydrodynamics system of equations, *Computers and Fluids* (2017), doi: 10.1016/j.compfluid.2017.08.020

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.

#### ACCEPTED MANUSCRIPT

### Highlights

- better accuracy on vortex like structures.
- the method is able to capture sharper interfaces and shock waves.
- the numerical method is as robust as a first-order accurate scheme in extreme situations (maintaining positivity, avoiding Not-a-Number values), and as accurate as unlimited second-order remaps scheme on smooth flows.



### Download English Version:

# https://daneshyari.com/en/article/7156107

Download Persian Version:

https://daneshyari.com/article/7156107

<u>Daneshyari.com</u>