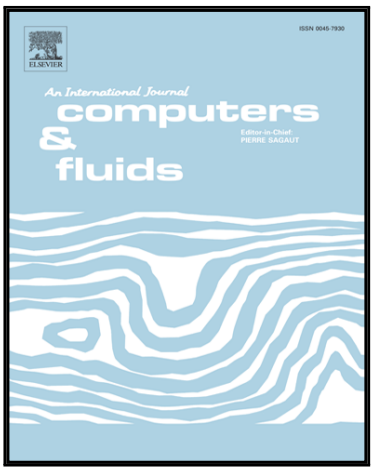
Accepted Manuscript



An efficient finite volume method for one-dimensional problems with application to the dynamics of capillary jets

J. Rivero-Rodríguez, M. Pérez-Saborid

PII: S0045-7930(17)30188-3
DOI: 10.1016/j.compfluid.2017.05.020
Reference: CAF 3490

To appear in: *Computers and Fluids*

Received date: 25 January 2017
Revised date: 4 May 2017
Accepted date: 22 May 2017

Please cite this article as: J. Rivero-Rodríguez, M. Pérez-Saborid, An efficient finite volume method for one-dimensional problems with application to the dynamics of capillary jets, *Computers and Fluids* (2017), doi: 10.1016/j.compfluid.2017.05.020

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

- A numerical method to solve problems on the dynamics of capillary jets.
- Equations are written in conservation form and the surface parametrized conveniently.
- Numerical advantages: avoids artificial viscosity and upwinding.
- Algebraic advantages: avoids high order derivatives and new discretization at the tip.

ACCEPTED MANUSCRIPT

Download English Version:

https://daneshyari.com/en/article/5011711

Download Persian Version:

https://daneshyari.com/article/5011711

Daneshyari.com