

Accepted Manuscript

An operator expansion method for computing nonlinear surface waves on a ferrofluid jet

Philippe Guyenne, Emilian I. Părău

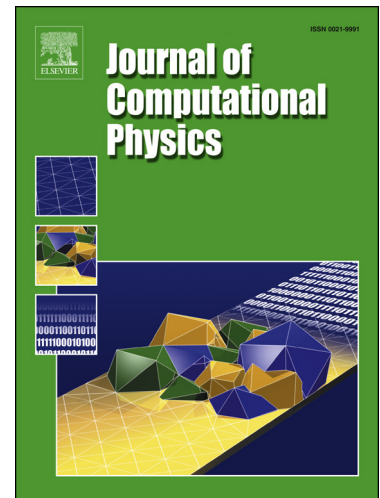
PII: S0021-9991(16)30200-5
DOI: <http://dx.doi.org/10.1016/j.jcp.2016.05.055>
Reference: YJCPH 6652

To appear in: *Journal of Computational Physics*

Received date: 20 November 2015
Revised date: 17 May 2016
Accepted date: 27 May 2016

Please cite this article in press as: P. Guyenne, E.I. Părău, An operator expansion method for computing nonlinear surface waves on a ferrofluid jet, *J. Comput. Phys.* (2016), <http://dx.doi.org/10.1016/j.jcp.2016.05.055>

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.



Highlights

- Accurate and efficient numerical solver for the full nonlinear problem.
- Reduction of the original problem to a lower-dimensional system of equations.
- Series expansion for the Dirichlet-Neumann operator in the axisymmetric case.
- Study of head-on and overtaking collisions of axisymmetric solitary waves.

Download English Version:

<https://daneshyari.com/en/article/6929779>

Download Persian Version:

<https://daneshyari.com/article/6929779>

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