## Accepted Manuscript

A New Level Set Numerical Wave Tank with Improved Density Interpolation for Complex Wave Hydrodynamics

Hans Bihs, Arun Kamath, Mayilvahanan Alagan Chella, Ankit Aggarwal, Øivind Asgeir Arntsen

 PII:
 S0045-7930(16)30272-9

 DOI:
 10.1016/j.compfluid.2016.09.012

 Reference:
 CAF 3273



To appear in: *Computers and Fluids* 

Received date:1 September 2015Revised date:15 July 2016Accepted date:10 September 2016

Please cite this article as: Hans Bihs, Arun Kamath, Mayilvahanan Alagan Chella, Ankit Aggarwal, Øivind Asgeir Arntsen, A New Level Set Numerical Wave Tank with Improved Density Interpolation for Complex Wave Hydrodynamics, *Computers and Fluids* (2016), doi: 10.1016/j.compfluid.2016.09.012

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 new level set based numerical wave tank
- High-order discretization for accurate modeling of wave hydrodynamics
- Improved density interpolation for improved stability and accuracy
- Very good numerical results for non-breaking waves
- Breaking wave kinematics are fully captured

Download English Version:

## https://daneshyari.com/en/article/5012045

Download Persian Version:

https://daneshyari.com/article/5012045

Daneshyari.com