

## A Spectral Element Method for Nonlinear and Dispersive Water Waves - DTU Orbit (08/11/2017)

## A Spectral Element Method for Nonlinear and Dispersive Water Waves

The use of flexible mesh discretisation methods are important for simulation of nonlinear wave-structure interactions in offshore and marine settings such as harbour and coastal areas. For real applications, development of efficient models for wave propagation based on unstructured discretisation methods is of key interest. We present a high-order general-purpose three-dimensional

numerical model solving fully nonlinear and dispersive potential flow equations with a free surface.

## **General information**

State: Published

Organisations: Department of Applied Mathematics and Computer Science , Scientific Computing, Chalmers University of

Technology

Authors: Engsig-Karup, A. P. (Intern), Bigoni, D. (Intern), Eskilsson, C. (Ekstern)

Number of pages: 1 Publication date: 2015

Event: Poster session presented at SIAM Conference on Computational Science and Engineering (SIAM CSE 2015), Salt

Lake City, Utah, United States.

Main Research Area: Technical/natural sciences

Source: PublicationPreSubmission

Source-ID: 118278124

Publication: Research - peer-review > Poster - Annual report year: 2015