

Invitation for participation

OPEN SCIENCE MEETING 2017 (Scientific cooperation Indonesia-Netherlands)

MASTER CLASS, 17 (and 18) May 2017

Coastal and oceanic resilience by harnessing, simulating and observing Indonesian waters

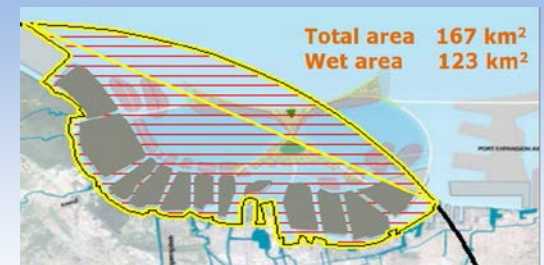
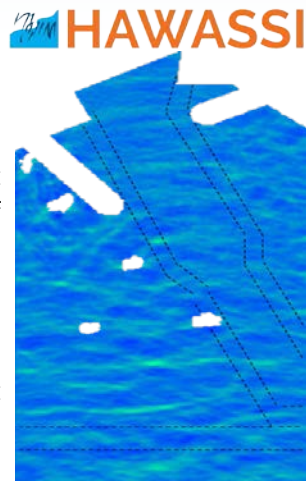
at Laboratory for Harbor Infrastructure
and Coastal Dynamics Technology
Yogyakarta, Indonesia

The intention of the master class is to let students and other interested people get acquainted with the current exciting problems that are still to be solved in the area of ocean and coastal engineering.

The Coastal laboratory (BPPT) will show the facilities and given an overview, and present some specialized lectures to highlight the activities. In this context, the best practices, application and theories, in the numerical model will also be presented and discussed.

LabMath-Indonesia will in particular introduce the so-called HAWASSI-software that has been developed in the past years. The software can simulate waves in harbours to assist in design, construction and dredging; this could support the Indonesian development of transport of people and goods, marine-energy systems and near-coast oil and gas activities. But also for simulations in deep water to support the disclosure of East Indonesia, where ocean waves are much higher and mooring is more difficult. The software is also used to improve (distorted) radar images to observe and predict dynamic phase-resolved waves from a ship or coastline.

Registration: Send motivation letter & cv to info@labmath-indonesia.org
Info: www.labmath-indonesia.org
<http://opensciencemeeting.org/master-classes/>



Programme: Day 1: Wednesday, 17 May

- 08.30 Registration
- 09.00 Introduction of the masterclass
- 09.15 Introduction of BPPT Yogya Laboratorium
- 09.45 Tour Yogya Lab
- 10.15 Lecture: **'Technology development of ocean renewable energy conversion at BPPT's Indonesian Hydrodynamic Laboratory'** by Dr. Erwandi (BPPT Surabaya)
- 10.45 Break
- 11.15 Lecture: **'Simulation of extreme waves, harbour waves and a tsunami on the Jakarta Garuda Wall'** by Dr. Ruddy Kurnia (LabMath)
- 11.45 Break ISHOMA
- 13.30 Lecture: **'Challenging issues in the coastal numerical modelling'** by Gugum Gumbira, M.Si. and Mardi Wibowo, MT. (BPPT Yogya)
- 14.00 Lecture: **'Sensitivity of the Tsunami Modeling due to various source parameters and DEM data'** by Dr. -Ing. Widjo Kongko (BPPT Yogya)
- 14.30 Lecture: **'Ocean wave reconstruction and prediction from radar images'** by Andreas P., M.Si (LabMath)
- 15.00 Break
- 15.30 Lecture: **'HAWASSI wave modelling and simulation'** by Prof. E. van Groesen (University of Twente & LabMath)
- 16.00 Discussion & Closure

Day 2: Thursday 18 May (Optional) Introduction to use of HAWASSI



BALAI TEKNOLOGI
INFRASTRUKTUR
PELABUHAN DAN
DINAMIKA PANTAI