Osaka University
Graduate School of Engineering
Department of Naval Architecture & Ocean Engineering

Hydro-Seminar

by Lab. of Floating-Body Dynamics in Waves

The speaker in the 19th Hydro-Seminar is

Professor Odd M. Faltinsen

Centre for Ships and Ocean Structures (CeSOS) and
Department of Marine Technology,
Norwegian University of Science and Technology, Norway

Date: **Tuesday, 20 September, 2011**
Time: **14:30 – 15:30**
Venue: **Library Hall of Science and Engineering Library**
Suita Campus, Osaka University
http://suita.library.osaka-u.ac.jp/intro_access.html

Ship-to-ship interaction and maneuvering in waves

Abstract

CFD and simplified modular manoeuvring models are discussed with emphasis on ship-ship interaction. The importance of ship end effects on ship-ship interaction necessitates a 3D analysis. A limited error analysis for a modular manoeuvring model is applied to a single ship in calm water. How to account for wave effects by means of mean wave loads is briefly described. A method to predict mean wave loads on a single ship as well as on interacting ships at forward speed is presented. Satisfactory agreement between numerical simulations and experiments of the trajectory of the SR-108 container vessel in a turning manoeuvre in regular waves is demonstrated. The presence of resonant water motion in the gap between two ships is discussed and a simplified method to account for flow separation at the gap entrance is presented. It is discussed how to generalize the method to ship manoeuvring.

The Speaker: **Professor Odd M. Faltinsen**

Faltinsen took the PhD degree at the University of Michigan in 1971. He started his career in Det Norske Veritas from 1968 to 1974, and was appointed docent in marine technology at the Norwegian Institute of Technology in 1974. In 1976 he was promoted to professor of marine hydrodynamics. He has educated 50 PhD students so far. Faltinsen has been member of 5 ITTC committees including 2 as chairman, and 3 ISSC committees. He is a member of the Norwegian Academy of Science and Letters, the Norwegian Academy of Technological Sciences, the Chinese Academy of Engineering and the National Academy of Engineering of the United States of America. Faltinsen received the Fridtjof Nansen award for outstanding research in science and medicine in 2011. He is now connected to the Centre for Ships and Ocean Structures (CeSOS) at the Norwegian University of Science and Technology. *http://en.wikipedia.org/wiki/Odd_Magnus_Faltinsen*

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