

# Hydro-Seminar

by Lab. of Floating-Body Dynamics in Waves

The second speaker in the 50th Hydro-Seminar is

## Dr. Jae-Hoon Lee

Post-doctoral Fellow  
At Department of Naval Architecture & Ocean Engineering  
Osaka University, Osaka, Japan



**Date:** Friday, 18 January, 2019  
**Time:** 16:00 – 17:00  
**Venue:** S1-412 (Lecture room, 4F of S1 building)  
Suita Campus, Osaka University

## Numerical Analysis on Ship Maneuvering in Waves

### Abstract

This seminar will introduce numerical analysis related to the maneuverability of ship in waves. In the numerical simulation, the time domain direct coupling method is applied to integrate the seakeeping and maneuvering performances of ship. Based on the computation results for the turning test and the course-keeping test in waves, the following coupling effects on the ship operation performance will be discussed; 1) steady-flow induced coupling effect, 2) weakly nonlinear effect, and 3) large-amplitude oscillatory maneuvering motion effect.

### The Speaker: Dr. Jae-Hoon Lee

Dr. Jae-Hoon Lee graduated Seoul National University for his bachelor and PhD degrees in 2011 and 2018. He was engaged in post-doctoral fellow at Seoul National University (supervisor: Prof. Yonghwan Kim) in 2018. Currently, he is a post-doctoral fellow at Osaka University (supervisor: Prof. Masashi Kashiwagi). His main research topic is a numerical analysis on ship operation performance in waves.



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