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 40th Hydro-Seminar is

Dr. Abbas Khayyer

Associate Professor, Applied Mechanics Laboratory,
Department of Civil and Earth Resources Engineering
Kyoto University

Date: **Monday, 15 May, 2017**
Time: **15:00 – 16:30**
Venue: **S1-412 (Lecture room, 4F of S1 building)**
Suita Campus, Osaka University

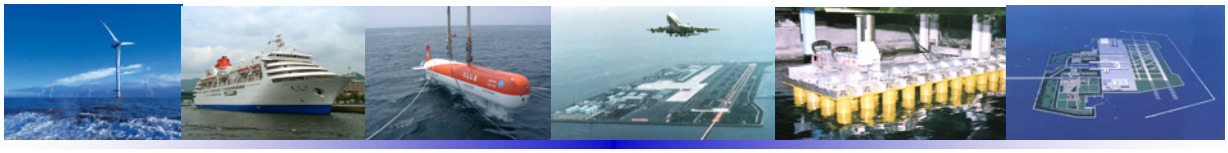
Lagrangian Particle Methods for Ocean Engineering - Current Achievements and Future Perspectives

Abstract

The presentation comprises of a concise review on the latest achievements made in the context of projection-based particle methods with applications in ocean engineering. Projection-based particle methods, including Incompressible SPH and MPS, are founded on Helmholtz-Leray decomposition. The latest achievements corresponding to stability, accuracy, boundary conditions and energy conservation enhancements as well as advancements related to simulations of multiphase flows, fluid-structure interactions and surface tension will be briefly discussed. The future perspectives for further enhancements of applicability and reliability of particle methods are also highlighted.

The Speaker: Dr. Abbas Khayyer

Dr. Abbas Khayyer is an Associate Professor at Applied Mechanics Laboratory in Civil and Earth Resources Engineering at Kyoto University. He holds a BSc in Civil Engineering (2002), MSc in Hydraulic Structures (2005) and PhD in Civil Engineering (2008). After obtaining his PhD in 2008, Dr. Khayyer continued his study as a postdoctoral research associate at Kyoto University for one year. In 2009, he was appointed as a Lecturer and then in April 2013 he was promoted to Associate Professor at Applied Mechanics Laboratory. Dr. Khayyer's research interest mainly include Computational Fluid and Structure Dynamics, Particle Methods and Fluid-Structure Interactions. He has published about 80 papers in journals and conferences including 45 peer-reviewed journal papers. Dr. Khayyer is a member of Editorial Board of Applied Ocean Research, an Associate Editor of International Journal of Offshore and Polar Engineering and a Technical Program Committee of ISOPE conferences since 2015.



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