The 3rd International Symposium on Novel Computational and Experimental Methods for Complicated Fluid-Structure Interactions

Date: January 21, 2022

Place: Zoom Meeting Room (From 9:50 Japan time)

Organized by Research Institute for Applied Mechanics, Kyushu University

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TIME TABLE

9:50 -10:00	Opening Address by Changhong Hu

Session 1 ***High Performance Numerical Method***

10:00 - 10:30	**Yingyi Liu** (RIAM, Kyushu University) Computational Accuracy and efficiency for Diffraction Transfer Matrix using Hybrid Source-dipole Formulations
10:30 - 11:00	**Zhiteng Gao** (Shanghai Jiao Tong University, China) Validation and Improvement of Actuator Line Model in the Large-Eddy Simulation of Wind-Turbine Wakes
11:00 - 11:30	**Lei Tan** (RIAM, Kyushu University) Motion and Load Characteristics of a Barge-Type Vertical-Axis Floating Wind Turbine with Moonpools
11:30 - 12:00	**Tomoaki Hirakawa** (Akita University) Improved BEM Simulation for Wave-Body Interactions by Elastic Mesh Techniques

12:00 - 13:00	Lunch break

Session 2 ***Tidal Current and Wave Energy***

13:00 - 13:40	**Daisaku Sakaguchi**, Reiko Yamada, Yusaku Kyozuka (Nagasaki University) *Invited Lecture* Design Optimization of Tidal Current Turbines by Meta-model Assisted Genetic Algorithms
13:40 - 14:10	**Mohamed Kamra**, Rui Yamamoto, Changhong Hu (RIAM, Kyushu University) Application of Machine Learning to Wake Prediction of Tidal Current Turbine
14:10 - 14:40	**Patxi Garcia Novo** (Nagasaki University) Tidal Stream Energy as a Potential Continuous Power Producer: A Case Study for West Japan
14:40 - 15:10	**Peiwen Cong** (Dalian University of Technology, China) Numerical Evaluation of the Hydrodynamic Performance of Multi-Degree-of-Freedom Floating Oscillating Water Column (OWC) Devices

15:10 - 15:30	Break

Session 3 ***Offshore Wind Energy***

15:30 - 16:00	**Dezhi Wei**, Decheng Wan (Shanghai Jiao Tong University, China) Analytical Modeling of Multiple Yawed Turbine Wakes: Considering the Effects of Transverse Wake Velocity
16:00 - 16:30	**Xiaobo Zheng** (Shanghai Jiao Tong University, China) Aerodynamic Response of a Pitching Foil to Vortex Shedding - Some Inspiration for the Vertical-Axis Wind Turbine
16:30-17:00	**Ali Alkhabbaz**, Ho-Seong Yang, Watchara Tongphong, Young-Ho Lee (Korea Maritime & Ocean University, Korea) Aerodynamic Performance Analysis of Floating Wind Turbine Experiencing Platform Surge Motion
17:00 - 17:30	**Nitin Thulkar** (Chartered Engineer IET, UK) A Unified Seakeeping and Maneuvering Analysis of Multiple Linked Towing System with Triangular Bodies
17:30 - 18:10	**Zhiqiang Hu** (Newcastle University, UK) *Invited Lecture* Application of SADA Method on Dynamic Performances Analysis of FOWT : Case of Study with Full-Scale Hywind Data

18:10 - 18:20	Closing Address by Decheng Wan

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