

土木及環境工程學系 DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

SMOOTHED PARTICLE HYDRODYNAMICS (SPH) FOR MODELING FLUID-STRUCTURE INTERACTIONS

Speaker Prof. Moubin LIU

Peking University, China

Abstract

SPH, as a truly Lagrangian and meshfree particle method, is very attractive in modeling fluid-structure interaction (FSI) problems. This talk reports some recent developments of SPH method in modeling FSI problems with rigid, elastic and flexible structures, with granular materials, and with extremely intensive loadings.

Biography

Moubin Liu is a Tenured Full Professor, and the Vice Dean of the College of Engineering, Peking University. His interests include computational fluid and solid dynamics, meshfree particle methods, and CAE software development. He authored two popular monographs, including the first-ever book on the Smoothed Particle Hydrodynamics. He published over 160 SCI indexed papers with more than 10 ESI highly cited papers. He has received a number of awards from universities and scientific organizations worldwide including the International Computational Award (2019), ICACM Computational Mechanics Award (2018), First Prize in Natural Sciences from the Ministry of Education (2017), the 100 Talent Program Award from CAS (2009), and the prestigious Singapore Lee Kuan Yew Fellowship Award (2005). He is the associate editor of EABE and IJCM and the editorial Board Member of several other international journals

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10:30 am - 11:30 am



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