



A Brief Online
Workshop on SPH
October 3, 2025
(8:00 – 11:10 AM UTC)

SPH Online VII

Focus Topic: “Fluid-Structure Interactions”

*This brief online workshop aims to bring SPH experts and potential future developers together to discuss the latest developments and future perspectives corresponding to **fluid-structure interactions** in the SPH context.*

Followed by six previous SPH Online workshops organised during the past five years, we are pleased to announce that the seventh SPH Online workshop, i.e., **SPH Online VII**, will be held on **Friday, October 3, 2025**. The focus topic of SPH Online VII will be “**Fluid-Structure Interactions**”. SPH Online VII will be organised jointly by Kyoto University, The University of Manchester, Technical University of Munich and The University of Glasgow. SPH Online is an **SPHERIC**-affiliated event. We cordially welcome you to register and participate in this online workshop.

We are delighted to welcome **Prof. Javier Calderón Sánchez** as one of the reputable experts of Computational Mechanics and SPH to kindly deliver the **Keynote Speech** of SPH Online VII. We will have *five Invited Talks* and a *Panel Discussion* related to the focus topic. Interested researchers who would like to join this online workshop are invited to fill in the following *registration form* by **September 25th, 2025**.

Registration Form:

<https://forms.gle/h6u CZavvafbxNHKu5>



We look forward to welcoming you to SPH Online VII.

Yours sincerely,

Abbas Khayyer, Benedict D. Rogers, Xiangyu Hu & Chun Hean Lee
Organisers of SPH Online VII

For questions or inquiries please contact:

Abbas Khayyer at khayyer@particle.kuciv.kyoto-u.ac.jp

The workshop is free of charge and all participants will receive the recorded video of the workshop

Programme

Welcome Message by Prof. Benedict D. Rogers (The University of Manchester, Manchester, United Kingdom)

8:00 – 8:05 UTC

Keynote Speech by Prof. Javier Calderón Sánchez (CEHINAV-ETSIN, Universidad Politécnica de Madrid, Madrid, Spain)

8:05 – 8:35 UTC

“Sloshing-Induced Fluid–Structure Interactions with SPH”

Invited Talk* 1 by Dr Joseph O’Connor (EPCC, University of Edinburgh, Edinburgh, United Kingdom)

8:35 – 8:55 UTC

“A Unified SPH Framework for Flexible Fluid-Structure Interaction with DualSPHysics”

Invited Talk 2 by Dr Gioele Ruffini (Department of Civil, Building and Environmental Engineering, Sapienza University of Rome, Rome, Italy)

8:55 – 9:15 UTC

“Structural response of non-rigid structures impacted by waterborne debris during extreme hydrodynamic events”

Coffee Break (9:15 – 9:25 UTC)

Invited Talk 3 by Prof. Daniel Shiguo Morikawa (Tongji University, Shanghai, China)

9:25 – 9:45 UTC

“A phase-change approach to landslide simulations: coupling finite strain elastoplastic TLSPH with non-Newtonian IISPH”

Invited Talk 4 by Prof. Peng-Nan Sun (School of Ocean Engineering and Technology, Sun Yat-sen University, Zhuhai, China)

9:45 – 10:05 UTC

“Multi-resolution particle methods for complex fluid-structure interactions: handling multiple fluids, extreme deformations and fractures”

Invited Talk 5 by Prof. Lin Fu (Department of Mechanical and Aerospace Engineering, The Hong Kong University of Science and Technology, Hong Kong, China)

10:05 – 10:25 UTC

“SPH method for high-Reynolds-number FSI problems”

* Each talk consists of a 15-minute-presentation followed by 5 minutes of discussion

Panel Discussion – Chair: Dr Chun Hean Lee (The University of Glasgow, Glasgow, United Kingdom), **Panel Members: Prof. Fei Xu** (School of Aeronautics, Northwestern Polytechnical University, Xi'an, China), **Prof. Alessandro Franci** (International Center for Numerical Methods in Engineering CIMNE, Barcelona, Spain), **Dr Michel Make** (FIFTY2 Technology GmbH, Freiburg, Germany), **Dr Takafumi Gotoh** (Department of Engineering, University of Cambridge, Cambridge, United Kingdom)

10:25 – 11:00 UTC

“SPH & Fluid-Structure Interactions”

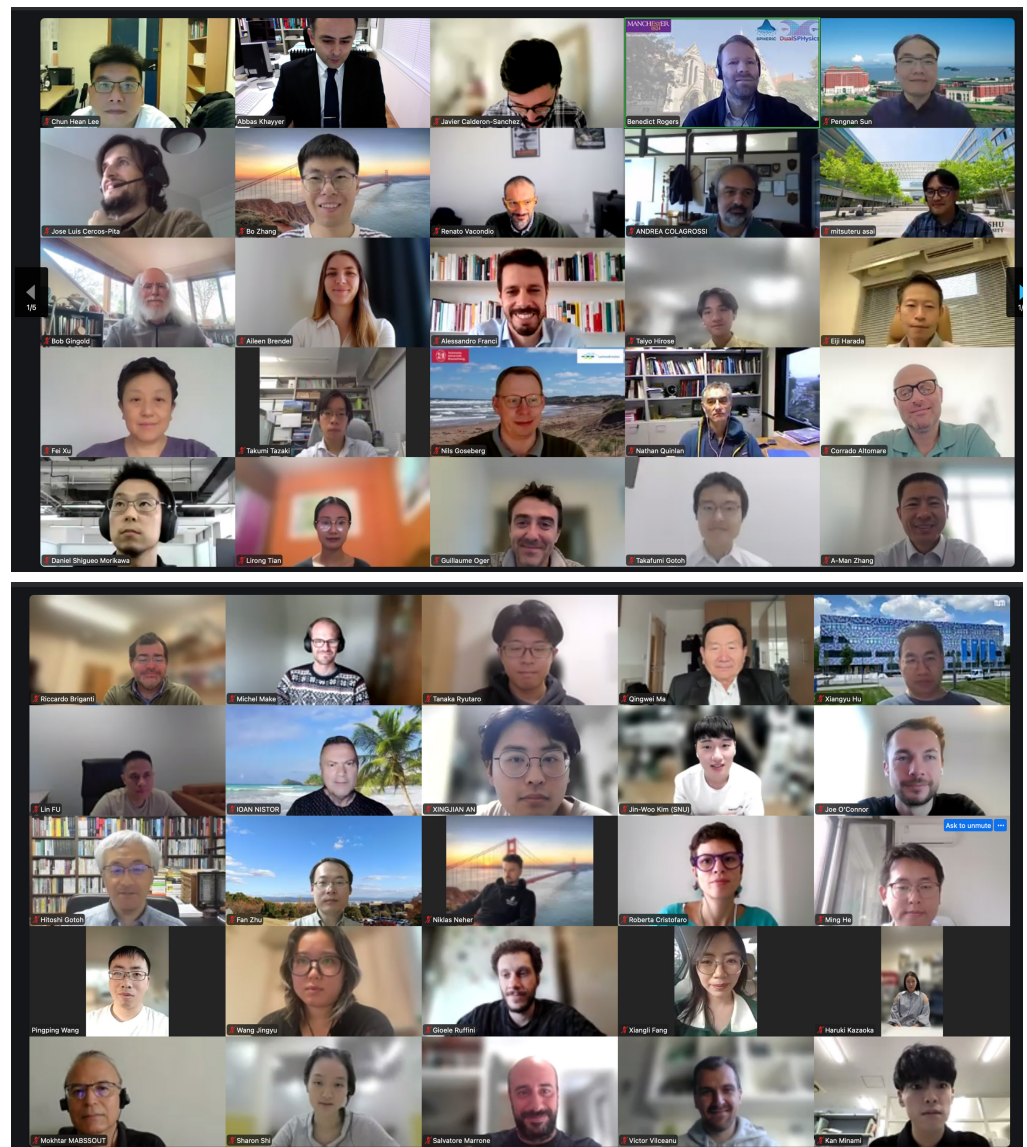
Closing Remarks by Dr Abbas Khayyer (Kyoto University, Kyoto, Japan)

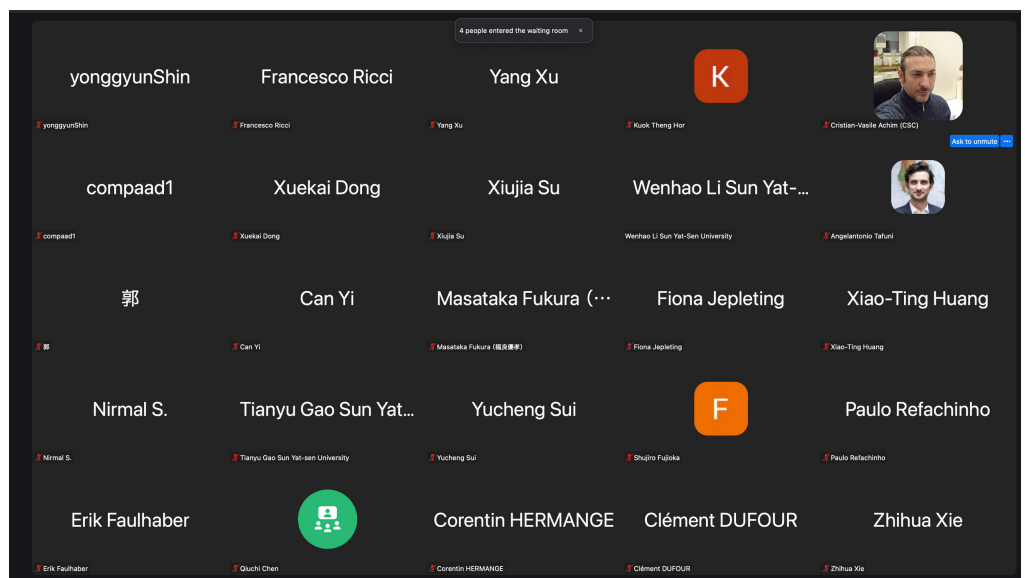
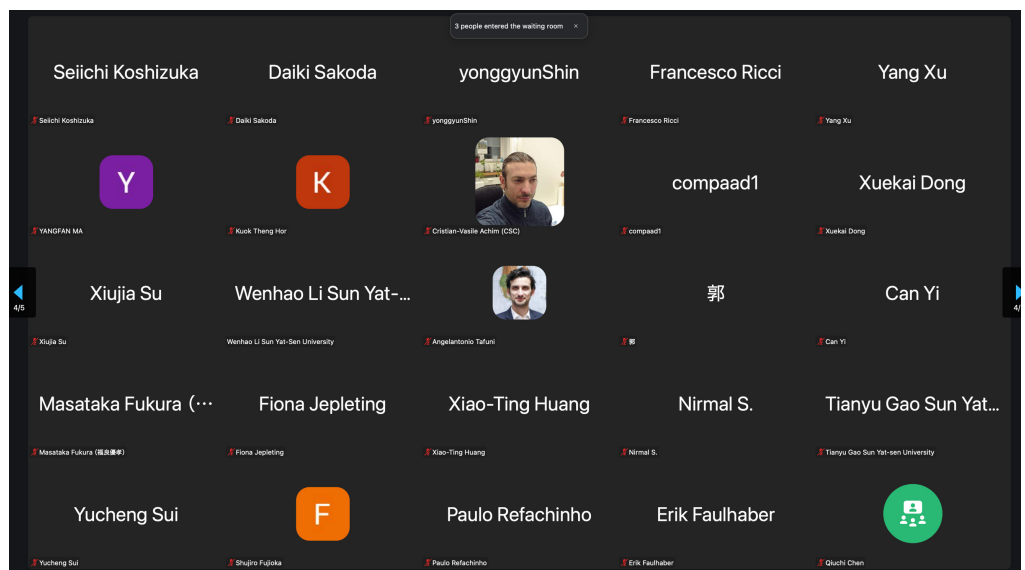
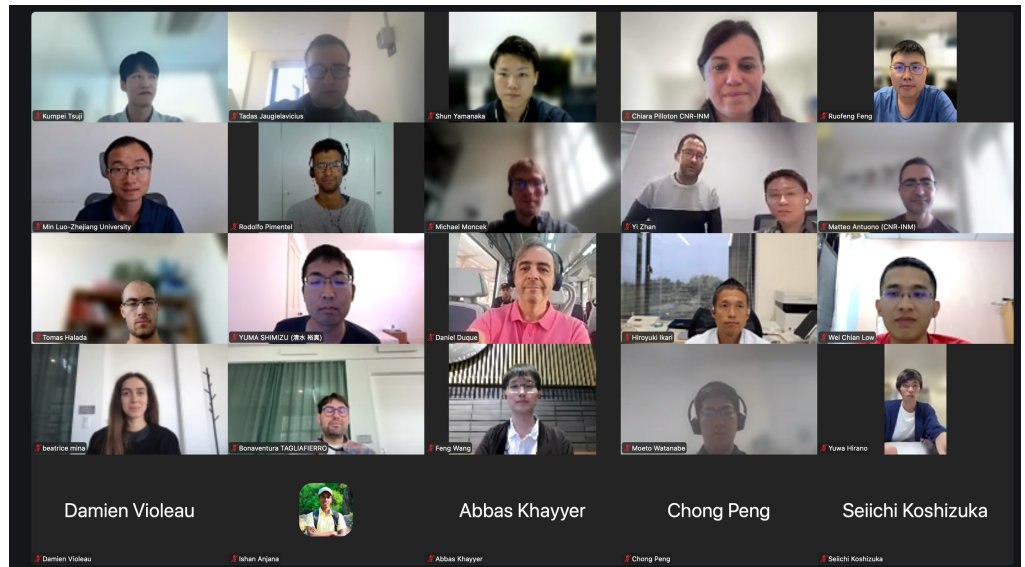
11:00 – 11:10 UTC

Recorded Video: [\[Link\]](#)

Passcode: R1h*EGyC

YouTube Video (tentative one): [\[Link\]](#)





Special Thanks to:

Distinguished Invited Delegates of SPH Online VII: Prof. Javier Bonet, Prof. Seiichi Koshizuka, Prof. Hitoshi Gotoh, Prof. Pengzhi Lin, Prof. Qingwei Ma, Prof. Damien Violeau, Prof. Andrea Colagrossi, Prof. Antonio J. Gil, Prof. Ha Bui, Prof. A-Man Zhang, Prof. Prabhu Ramachandran, Prof. Mitsuteru Asai, Prof. Eung Soo Kim, *Invited Speakers, Panelists* and *SPHERIC Steering Committee Members*

*SPH Online welcomes
Registered/Invited
Participants.*

For questions or inquiries please contact:

Abbas Khayyer at khayyer@particle.kuciv.kyoto-u.ac.jp