

A Brief Online Workshop on SPH October 6, 2023 (8:00 – 11:10 AM UTC)



Focus Topic: SPH & Industry

Followed by four previous SPH Online workshops organised during the past three years, we are pleased to announce that the fifth SPH Online workshop, i.e. **SPH Online V**, will be held on **Friday, October 6, 2023**. The focus topic of SPH Online V will be *SPH & Industry*. SPH Online V will be organised jointly by Kyoto University, The University of Manchester, Siemens Digital Industries Software and Dive Solutions. SPH Online is a SPHERIC-affiliated event and we will cordially welcome you to register and participate in this online workshop.

We are honoured to welcome **Dr Jean-Christophe Marongiu** as one of the eminent experts of Computational Mechanics and SPH to kindly deliver the **Keynote Speech** of SPH Online V. We are honoured to welcome **Prof. Prapanch Nair** as one of the reputable experts of Computational Mechanics and SPH to kindly deliver the **Closing Remarks Speech** of the workshop. 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 15<sup>th</sup>, 2023**.

Registration Form: https://forms.gle/mZ7rUXhW6jsE75Rm6

We look forward to welcoming you to SPH Online V.

Sincerely,

Abbas Khayyer, Benedict D. Rogers, Matthieu De Leffe & Pierre Sabrowski Chairs of SPH Online V

For questions or inquiries please contact: Abbas Khayyer at khayyer@particle.kuciv.kyoto-u.ac.jp

This brief online workshop aims to bring SPH experts and potential future developers together to discuss the latest developments and future perspectives corresponding to Industrial Applications The workshop is free of charge and all participants will receive the recorded video of the workshop

## Programme

Welcome Message by Dr Abbas Khayyer (Kyoto University, Kyoto, Japan) 8:00 – 8:05 UTC

Keynote Speech by Dr Jean-Christophe Marongiu (Pelton Technology Hydraulic Laboratory, ANDRITZ Hydro, Switzerland) 8:05 – 8:35 UTC "SPH applied to flows in hydraulic turbines"

Invited Talk<sup>\*</sup> 1 by Mr Marian Majda (FIFTY2 Technology GmbH, Germany) 8:35 – 8:55 UTC "SPH vs. CFD? From sceptics to fans"

Invited Talk 2 by Prof. Peter Eberhard and Ms Elizaveta Shishova (Institute of Engineering and Computational Mechanics, University of Stuttgart, Germany)

8:55 – 9:15 UTC "Friction Stir Welding Simulation Using SPH"

**Coffee Break** (9:15 – 9:25 UTC)

Invited Talk 3 by Mr Christof Lüthi (Data-driven & Computational Manufacturing Group, inspire AG, Switzerland)

9:25 – 9:45 UTC "SPH for Manufacturing Process Simulations: The Good, The Bad, and The Real World"

Invited Talk 4 by Dr Bonaventura Tagliafierro (University of Wisconsin-Madison, USA and the Universitat Politècnica de Catalunya, Spain) 9:45 – 10:05 UTC "Coupling SPH with multiphysics solvers for engineering applications: WECs and FOWTs"

Invited Talk 5 by Prof. Eung Soo Kim (Department of Nuclear Engineering, Seoul National University, South Korea)

10:05 – 10:25 UTC "Applications of SPH for Severe Nuclear Accidents"

<sup>\*</sup> Each talk consists of a 15-minute-presentation followed by 5 minutes of discussion

Panel Discussion – Chair: Prof. Benedict D. Rogers (The University of Manchester, United Kingdom), Panel Members: TBA 10:25 – 11:00 UTC "SPH & Industry – current status and future perspectives"

Closing Remarks by Prof. Prapanch Nair (Indian Institute of Technology Delhi, India) 11:00 – 11:10 UTC

SPH Online Award (Best Presentation Award): TBA

Award Selection Committee: TBA

SPH Online welcomes Registered/Invited Participants.

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