GPPS | CFD WORKSHOP 2023 October 16th
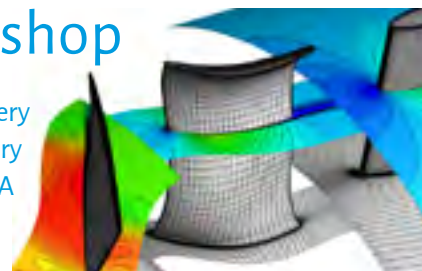
Global Power & Propulsion

GPPS 3rd Turbomachinery CFD Workshop

During the Workshop we look forward to improving users' trust in turbomachinery RANS analysis by conducting a validation and verification of some turbomachinery RANS solvers using the TUDA-GLR-OpenStage transonic axial compressor, the BUAA low speed large scale axial compressor and the ETH Zurich 1.5-stage turbine.

Schedule

ROOM 1

Local Time Hong Kong

10:30 → → →	**Introduction to the Workshop** Welcome message by Dingxi Wang (Northwestern Polytechnical University)
10:50 → → →	**Validation of k-omega SST modifications in the turbomachinery context using two axial rotors** Natan Zawadzki (University of Oxford)
11:15 → → →	**Summary of Participants' Results: for the BUAA stage B compressor** Jiazi Zhao (Northwestern Polytechnical University)
11:40 → → →	**Participant Presentation** Dai Kanzaki (IHI Corporation)
11:50 → → →	**Participant Presentation** Chuanxiang Yan (Tsinghua University)
12:00 → → →	**Workshop Lunch**
14:00 → → →	**Revisiting the Verification and Validation of Turbomachinery CFD Codes** Shenren Xu (Northwestern Polytechnical University)

14:45 → → →	**Introduction of the TUDa compressor dataset** Fabian Klausman (TU Darmstadt)
15:10 → → →	**Summary of Participants' Results: for the TUDa Compressor** Xiao He/Dongming Cao (Imperial College/Northwestern Polytechnical University)
15:35 → → →	**Participant Presentation** Boqian Wang (Northwestern Polytechnical University)
16:45 → → →	**Participant Presentation** Qingyuan Zhuang (Siemens Industry Software Netherlands B.V.)
15:55 → → →	**Participant Presentation** Dai Kanzaki (IHI Corporation)
16:05 → → →	**Coffee Break**
16:25 → → →	**Summary of Participants' Results: for the ETH turbine** Xuanlong Da (Northwestern Polytechnical University)
16:50 → → →	**Participant Presentation** Dai Kanzaki (IHI Corporation)
17:00 → → →	**Participant Presentation** Boqian Wang (Northwestern Polytechnical University)
17:10 → → →	**Wrap-up and outlook (10 minutes)** Dingxi Wang (Northwestern Polytechnical University)

Workshop Organizers

Mehdi Vahdati, Xiao He
(Imperial College London)

Shenren Xu, Dongming Cao, Dingxi Wang
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