

OS16: Vortex Motion

November 11, 2025

EX-Hall-1B

- OS16-1 **Vortex Merging Triggered by Hyperbolic Instability of 2D Taylor-Green Vortex**
17:00-17:20 Makoto Hirota, Naoya Ueno, Yuji Hattori (Tohoku University, Japan)
- OS16-2 **Shortwave Instability of Helical Vortices with Swirl**
17:20-17:40 Ivan Delbende (Sorbonne University, France), Yuji Hattori (Tohoku University, Japan), Maurice Rossi (Sorbonne University, France)
- OS16-3 **Nonlinear Dynamics and Turbulent Transition of a Helical Vortex Disturbed by the Short-wave Instabilities**
17:40-18:00 Daisuke Nishiyama, Yuji Hattori (Tohoku University, Japan)
- OS16-4 **Characteristics of Formation of Vortical Structure in Homogeneous Isotropic Turbulence**
18:00-18:20 Katsuyuki Nakayama (Aichi Institute of Technology, Japan)

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- OS16-5 **Global Stability Analysis of Boundary Layer Flow Over Complex Roughness Modeled by the Volume Penalization Method**
9:10-9:30 Hinata Fujii, Makoto Hirota, Yuji Hattori (Tohoku University, Japan)
- OS16-6 **DNS Investigation of the Mechanics of Görtler Vortices Breakdown in Hypersonic Flows**
9:30-9:50 Omar Es-Sahli, Matthew Brockhaus, Adrian Sescu (Mississippi State University, USA), Zamir Koshuriyan (University of York, UK), Yuji Hattori (Tohoku University, Japan)
- OS16-7 **Effect of Wall Temperature and Transpiration on Görtler Vortices in High-speed Boundary Layers**
9:50-10:10 Asmaa Ahaggach, Adrian Sescu (Mississippi State University, USA), Zamir Koshuriyan (University of York, UK), Yuji Hattori (Tohoku University, Japan)
- OS16-8 **Study on Rotating Flow Instability Induced by a Rotating Blade Cascade in Quiescent Fluid**
10:10-10:30 Daiki Tsuchida, Akihito Kiyama (Saitama University, Japan), Kazuhiko Yokota (Aoyama Gakuin University, Japan), Kotaro Sato (Kogakuin University, Japan), Donghyuk Kang (Saitama University, Japan)
- 10:30-10:45 BREAK
- OS16-9 **Representations for Wave Energy on Steady Flows of a Compressible Baroclinic Fluid**
10:45-11:05 Yasuhide Fukumoto (Kyushu University / Osaka Central Advanced Mathematical Institute, Japan), Rong Zou (Hawaii Pacific University, USA)

- OS16-10
11:05-11:25 **Numerical Simulation for Compressible Navier-Stokes Equation using SQUID**
Takashi Nakazawa (Kanazawa University / The University of Osaka, Japan)
- OS16-11
11:25-11:45 **PZT Generated BAW-Induced Streaming and Capillary Waves in Microliter Droplet on Paper-Substrate**
Vivek Karma, Subramaniam Pushpavanam (Indian Institute of Technology Madras, India)
- OS16-12
11:45-12:05 **Wind Tunnel Experiment and Numerical Simulation of Compressibility Effect for AGARD-B Model**
Hung-Yen Chou, Ting-Tsung Chang, Yi-Chung Liu (National Chung-Shan Institute of Science and Technology, Taiwan)