

OS16: Vortex Motion

October 29, 2021

ROOM6

- OS16-1 **Control of Görtler Vortices in High-Speed Boundary Layer Flows Using Nonlinear Boundary Region Equations**
9:20-9:40 Omar Es-Sahli, Adrian Sescu (Mississippi State University, USA), Mohammed Z. Afsar (University of Strathclyde, UK), Yuji Hattori, Makoto Hirota (Tohoku University, Japan)
- OS16-2 **Numerical Study on Local Scale Similarity of Primary and Secondary Crossflow Instability**
9:40-10:00 Makoto Hirota (Tohoku University, Japan), Yuki Ide (Japan Aerospace Exploration Agency, Japan), Yuji Hattori (Tohoku University, Japan)
- OS16-3 **Optimization of Turbulent Transition Delay Effect Using Dynamically Transforming Roughness Elements**
10:00-10:20 Takayuki Shirosaki, Makoto Hirota, Yuji Hattori (Tohoku University, Japan)
- OS16-4 **Characteristics of Inertial Waves on Axisymmetric Vortex**
10:20-10:40 Tetsuya Abe, Yuji Hattori (Tohoku University, Japan)
- OS16-5 **A Study of Velocity Structure of a Vortex in a Homogeneous Isotropic Turbulence**
11:10-11:30 Katsuyuki Nakayama (Aichi Institute of Technology, Japan)
- OS16-6 **Noether's Theorem, Relabeling Symmetry, Casimir Invariants, Generalized Bianchi Identity**
11:30-11:50 Yasuhide Fukumoto (Kyushu University, Japan), Rong Zou (University of Hawai'i at Mānoa, USA)
- OS16-7 **How Vortex Dynamics on the Corrugated Wing Works on the Aerodynamic Performance**
11:50-12:10 Yusuke Fujita, Makoto Iima (Hiroshima University, Japan)
- OS16-8 **Observation of Quantum Vortex in Superfluid He4**
12:10-12:30 Yoshiyuki Tsuji, Chen Lizhu, Naoto Sakaki (Nagoya University, Japan)
- OS16-9 **Numerical Study on Sounding Mechanism of Air-Jet Instruments with Compressible Fluid Simulation (*Invited*)**
13:30-14:10 Kin'ya Takahashi, Ryoya Tabata, Sho Iwagami, Shiryu Ikoga, Rei Sumita, Shota Takanami (Kyushu Institute of Technology, Japan), Taizo Kobayashi (Kyushu University, Japan), Yuji Hattori (Tohoku University, Japan)
- OS16-10 **Numerical Study of Note Transition with Fingering on a Woodwind Instrument**
14:10-14:30 Shota Takanami (Kyushu Institute of Technology, Japan), Taizo Kobayashi (Kyushu University, Japan), Kin'ya Takahashi (Kyushu Institute of Technology, Japan)

OS16-11 **Numerical Analysis of Three-Dimensional Model of Flue Organ Pipe**
14:30-14:50 Shiryu Ikoga, Ryoya Tabata, Sho Iwagami (Kyushu Institute of Technology,
Japan), Taizo Kobayashi (Kyushu University, Japan), Kin'ya Takahashi
(Kyushu Institute of Technology, Japan)

OS16-12 **The Effect of the Streamwise spatial Development of Reynolds Stress**
14:50-15:10 **Auto-covariance Tensor on the Low-frequency Acoustic Spectrum of a**
High-speed Supersonic Air Jet
Mohammed Afsar, Sarah Stirrat (University of Strathclyde, UK), Adrian
Sescu (Mississippi State University, USA)