OS16: Vortex Motion

November 8, 2019
EX-4

OS16-1
9:20-9:40
Scale Analysis for Primary and Secondary Instabilities of Three-dimensional Boundary Layer
Makoto Hirota (Tohoku University, Japan), Yuki Ide (Japan Aerospace Exploration Agency, Japan), Takahisa Hayashida, Yuji Hattori (Tohoku University, Japan),

OS16-2
9:40-10:00
Streak Growth in High-Speed Boundary Layers: Assessment through the Compressible Boundary Region Equations
Adrian Sescu (Mississippi State University, USA), Mohammed Z. Afsar (University of Strathclyde, UK), Yuji Hattori (Tohoku University, Japan)

OS16-3
10:00-10:20
Numerical Study on Relation between the Jet Oscillation and Acoustic Pressure in Edge Tone
Sho Iwagami, Ryoya Tabata (Kyushu Institute of Technology, Japan), Taizo Kobayashi (Kyushu University, Japan), Kin'ya Takahashi (Kyushu Institute of Technology, Japan), Yuji Hattori (Tohoku University, Japan)

OS16-4
10:40-11:00
Dynamics of a Doubly Infinite Vortex Array
Mikael A. Langthjem (Yamagata University, Japan)

OS16-5
11:00-11:20
Vortex Interactions of Three-Dimensional Swimmers
Dmitry Kolomenskiy, Gen Li (Japan Agency for Marine-Earth Science and Technology, Japan), Hao Liu (Chiba University, Japan), Benjamin Thiria, Ramiro Godoy-Diana (PMMH-ESPCI, France)

OS16-6
11:20-11:40
Numerical Simulation of Wake Deflection Control around NACA0012 Airfoil using Active Morphing Flaps
Takayuki Konishi, Yoshiaki Abe, Tomonaga Okabe (Tohoku University, Japan)

OS16-7
11:40-12:00
Flow Control by Shape Optimization based on Data-Driven and Model-Based Approaches
Takashi Nakazawa (Osaka University, Japan)

OS16-8
13:10-13:30
Stability Calculations for Vortex Rings with Unequal Densities and Surface Tension
Ching Chang, Stefan G. Llewellyn Smith (University of California San Diego, USA)

OS16-9
13:30-13:50
Numerical Simulation of Vertical Vorticity Generation in Unstable Stratified Shear Flow
Akira Takahashi, Makoto Hirota, Yuji Hattori (Tohoku University, Japan)

OS16-10
13:50-14:10
Numerical Studies on Structure of Jupiter's Great Red Spot based on Simplified Model
Ryo Nakazawa, Yuji Hattori (Tohoku University, Japan)

OS16-11
14:10-14:30
Definition and Characteristics of Local Axial Topology
Katsuyuki Nakayama (Aichi Institute of Technology, Japan)

OS16-12 14:50-15:10 **Flow Scale of the Trigger for the Vortex Generation in an Isotropic Homogeneous Turbulence**
Sho Saeki, Katsuyuki Nakayama (Aichi Institute of Technology, Japan)

OS16-13 15:10-15:30 **Analysis of Vortical Structure Based on Local Topology in Isotropic Homogeneous Turbulence**
Daiki Aoyama, Katsuyuki Nakayama (Aichi Institute of Technology, Japan)

OS16-14 15:30-15:50 **Stretching Effect for Swirling in Eigen-Vortical-Axis Lines in a Hierarchal Isotropic Homogeneous Turbulence**
Hayato Hori, Katsuyuki Nakayama (Aichi Institute of Technology, Japan), Yuji Hattori (Tohoku University, Japan)