

OS15: Turbulence: from Fundamentals to Applications

November 6, 2019

EX-4

- OS15-1 **Kolmogorov's Idea on the Universality of Turbulence and Finite-Reynolds-Number Effect** (*Invited*)
14:00-14:40 Yukio Kaneda (Nagoya University, Japan)
- OS15-2 **On the Applicability of Taylor's Frozen Hypothesis in Turbulent Channel Flow**
14:40-15:00 Ali Mehrez (Nagoya University, Japan), Yoshinobu Yamamoto (Takeda, Japan),
Yoshiyuki Tsuji (Nagoya University, Japan)
- OS15-3 **Large Spatio-temporal Fluctuation and Energy Cascade Dynamics in von Kármán Turbulence**
15:00-15:20 Ryo Araki, Susumu Goto (Osaka University, Japan)
- OS15-4 **Reactive Plume Dispersion over Urban Area** (*Invited*)
15:40-16:20 Chun-Ho Liu (The University of Hong Kong, Hong Kong, China)
- OS15-5 **Cluster of Inertial Particles and Fluid Acceleration in Turbulence at High Reynolds Numbers**
16:20-16:40 Sunao Oka, Susumu Goto (Osaka University, Japan)
- OS15-6 **Collision Statistics of Dust Particles in Compressible Turbulence**
16:40-17:00 Yoshiki Sakurai (Nagoya University, Japan), Takashi Ishihara (Okayama University, Japan), Hitomi Furuya, Masayuki Umemura (University of Tsukuba, Japan), Kenji Shiraishi (Nagoya University, Japan)
- OS15-7 **Shear Stress Measurement by Electrochemical Method in Pipe Flow**
17:20-17:40 Tong Tong, Tatsuya Tsuneyoshi, Yoshiyuki Tsuji (Nagoya University, Japan)
- OS15-8 **Secondary Instability of the Coherent Structure Artificially Excited in Turbulent Boundary Layer**
17:40-18:00 Kazuya Hirose, Tatsuya Itoh, Tomoya Kikugawa, Masaharu Matsubara (Shinshu University, Japan)

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- OS15-9 **Rotating Disks and Cones - Known and Unknowns in Transition to Turbulence** (*Invited*)
9:00-9:40 Kentaro Kato, P. Henrik Alfredsson (KTH Mechanics, Sweden), Rebecca J. Lingwood (KTH Mechanics, Sweden / Brunel University London, UK)
- OS15-10 **Improved Predictions of Trailing-edge Noise using Rapid-distortion Theory and CFD Data**
9:40-10:00 Mohammed Z. Afsar (University of Strathclyde, UK)

- OS15-11 **Heat Transfer and Pressure Drop in a Cross-Flow Heat Exchanger Integrated with Perforated Splitter Plate**
10:00-10:20 Ankit Chaudhary, Sunil Chamoli, Bipin Kishore, Manoj Kumar (DIT University, India)
- OS15-12 **Attachment-line Receptivity around a Swept Wing by Direct Numerical Simulation**
10:40-11:00 Aiko Yakeno, Shigeru Obayashi (Tohoku University, Japan)
- OS15-13 **Comparison of 3-D CFD Models for Free Convection Flow of Air above a Rotating Cylinder**
11:00-11:20 Xiuan-Ting Chiou, Kuang C. Lin (National Tsing Hua University, Taiwan)
- OS15-14 **Numerical Investigations into Diurnal Wind Characteristics**
11:20-11:40 Yilei Song, Linlin Tian, Ning Zhao (Nanjing University of Aeronautics and Astronautics, China)
- OS15-15 **Bio-Inspired Flight in Turbulence: Modeling and Data Analysis *(Invited)***
13:10-13:50 Thomas Engels (École Normale Supérieure, France / Technical University Berlin, Germany), Dmitry Kolomenskiy (Japan Agency for Marine-Earth Science and Technology, Japan), Kai Schneider (Aix-Marseille University, France), Marie Farge (École Normale Supérieure, France)
- OS15-16 **Studies on Flow Induced Vibration of Cylindrical Body Based on High Order LES and Coupled Solution of Flow and Structure**
13:50-14:10 Debasish Biswas (Toshiba Research and Development Center, Japan)
- OS15-17 **Numerical Investigations into Turbulence Characteristics in Wind Turbine Wakes**
14:10-14:30 Linlin Tian, Yilei Song, Ning Zhao (Nanjing University of Aeronautics and Astronautics, China)
- OS15-18 **Data Assimilation of Compressible Turbulent Jet Flow *(Invited)***
14:50-15:30 Paul Schwarz, Mathias Lemke, Jörn Sesterhenn (Institut für Strömungsmechanik und Technische Akustik, Germany)
- OS15-19 **Aerodynamic Sound Generated from Flows near the Human Vocal Folds Model**
15:30-15:50 Seiya Kosako, Tatsuya Tsuneyoshi, Yoshiyuki Tsuji (Nagoya University, Japan)
- OS15-20 **Sound Radiated from Low Mach Number Turbulent Boundary-layer Flows (Turbulent Boundary Layer On a Smooth Plate and Over a Forward Facing Step)**
15:50-16:10 Shiko Moriyama, Yohei Inoue, Hiroshi Maekawa (The University of Electro-Communications, Japan)
- OS15-21 **LBM with Adaptive Mesh for Turbulent Flows**
16:30-16:50 You-Sheng Zhou, Chung-Ming Wu, Chao-An Lin (National Tsing Hua University, Taiwan)
- OS15-22 **Effect of Polymer Additive to Skin Friction Coefficient and Scales of Turbulence in Two-Dimensional Channel Flow**
16:50-17:10 Yutaro Endo, Sattaya Yimprasert, Tatsuya Tsumura, Masaharu Matsubara (Shinshu University, Japan)
- OS15-23 **Direct Numerical Simulation of FENE-P Viscoelastic Fluid Flow Through a Channel**
17:10-17:30 Che-Yu Lin, Chao-An Lin (National Tsing Hua University, Taiwan)