

OS15: Turbulence: from Fundamentals to Applications

November 11, 2022

EX-4-B

- OS15-1 **Searching for a Wall Model in LES using a Data-Driven Approach**
9:30-9:50 Golsa Tabe Jamaat, Yuji Hattori (Tohoku University, Japan)
- OS15-2 **On the Explicit Structure of the Spectrum of Internal Vibrations for Stratified Rotating Flows**
9:50-10:10 Andrei Giniatoulline (Los Andes University, Colombia)
- OS15-3 **Effect of Large Scale Motions on Taylor's Hypothesis and Attached Eddy Model**
10:10-10:30 Yoshiyuki Tsuji, Koki Mizuno (Nagoya University, Japan), Yoshinobu Yamamoto (University of Yamanashi, Japan)
- OS15-4 **Turbulence Statistics of Logarithmic Region in Pipe Flow at High Reynolds Number**
10:40-11:00 Noriyuki Furuichi (National Institute of Advanced Industrial Science and Technology, Japan), Marie Ono (National Institute of Advanced Industrial Science and Technology / Nagoya University, Japan), Yoshiyuki Tsuji (Nagoya University, Japan)
- OS15-5 **The Characteristics of Elongated Large-Scale Structures in a Wall-Confined Shear Layer**
11:00-11:20 Takumi Akao, Tomoaki Watanabe, Koji Nagata (Nagoya University, Japan)
- OS15-6 **Extraction of Boundary Layer Transition Process Using Controlled Free Stream Disturbance and Ensemble Averaging**
11:20-11:40 Asahi Yoshida, Takeo Anada, Ryo Takai, Koki Matsui, Kentaro Kato, Masaharu Matsubara (Shinshu University, Japan)
- OS15-7 **Nozzle-geometry Dependence of Diffusion Characteristics in Lobed Jets**
11:40-12:00 Ren Fukui, Mamoru Takahashi, Koichi Tsujimoto, Toshitake Ando, Toshihiko Shakouchi (Mie University, Japan)
- OS15-8 **Physical Insights on Turbulence from Numerical Simulation of Dissipative Weak Solution to the Euler Equations (*Invited*)**
13:20-14:00 Takeshi Matsumoto (Kyoto University, Japan)
- OS15-9 **Global- and Local-Analysis of Velocity Field in Grid Turbulence**
14:00-14:20 Yulin Zheng, Tomoaki Watanabe, Koji Nagata (Nagoya University, Japan)
- OS15-10 **Laminarization in Subcritical Taylor–Couette–Poiseuille Flow with Increasing Pressure Gradient**
14:20-14:40 Yuki Matsukawa, Takahiro Tsukahara (Tokyo University of Science, Japan)

- OS15-11
14:50-15:10 **Application of a High Order LES Turbulence Model on Investigating the Effect of Vortex Generators on Film Cooling Effectiveness**
Debasish Biswas, Tomohiko Jimbo (Toshiba Research and Development Center, Japan)
- OS15-12
15:10-15:30 **Atmospheric Surface Layer Flows over a Dense City**
Lan Yao, Chun-Ho Liu (The University of Hong Kong, Hong Kong, China)
- OS15-13
15:30-15:50 **Morphological Effect on the Wake Flows after a Single Fractal Tree using Large-Eddy Simulation**
Shiyun Liu, Chun-Ho Liu (The University of Hong Kong, Hong Kong, China)
- OS15-14
15:50-16:10 **Amplitude Modulation of Velocity Fluctuations based on Atmospheric Flows over Real Urban Morphology**
Yixun Liu, Chun-Ho Liu (The University of Hong Kong, Hong Kong, China)
- OS15-15
16:30-16:50 **Analysis Of Lagrangian Droplet Dynamics Using Computational Singular Perturbation**
Lorenzo Angelini (King Abdullah University of Science and Technology, Saudi Arabia), Pietro Paolo Ciottoli (Sapienza University, Italy), Francisco E. Hernández-Pérez (King Abdullah University of Science and Technology, Saudi Arabia), Mauro Valorani (Sapienza University, Italy), Hong G. Im (King Abdullah University of Science and Technology, Saudi Arabia)
- OS15-16
16:50-17:10 **Heat Transfer Performance of Punched Holes on Fin Surface for the Flat Tube Bank Heat Exchanger**
Hayati Kadir Pazarlıoğlu (Aselsan Inc., Turkey), Ahmet Ümit Tepe (Tarsus University, Turkey), Kamil Arslan (Karabük University, Turkey)
- OS15-17
17:10-17:30 **Optimization of Influencing Parameters on Thermal Efficiency of Solar Air Heater with Elongated Impinging Jets and Dimpled Fin**
Ezgi Çalar, Kamil Arslan (Karabük University, Turkey), Hayati Kadir Pazarlıoğlu (Aselsan Inc., Turkey), Ahmet Ümit Tepe (Sinop University, Turkey)