## **OS14:** Turbulence: from Fundamentals to Applications

<u>EX-2</u> November 8, 2018

9:00-9:20 OS14-1 Turbulent Thermal Transport Over Sinusoidal Textured Superhydrophobic Surfaces <u>P.A. Fuaad</u>, K. Arul Prakash

9:20-9:40 OS14-2 An Experimental Investigation on Film Cooling Performance *X. Tan, Y. Shan, X. Zhu* 

9:40-10:00 OS14-3 Very-Large Eddy Simulation of Convective Heat Transfer <u>X. Han</u>, Z. Xia, J. Mao, Z. He

10:00-10:20 OS14-4 Influence and Improvement of Inlet Shape of Sirocco Fan J. Lee, J. Lee, J.-G. Bak, H. Lee. J. Cho

10:40-11:20 OS14-5 Invited The Large-Scale Anisotropic Structure of Small-Scale Turbulence <u>G. E. Elsinga</u>, T. Ishihara, M.V. Goudar, C.B. da Silva, J.C.R. Hunt

11:20-11:40 OS14-6 Hierarchy of Vortices in Wall-bounded Turbulence <u>*Y. Motoori*</u>, *S. Goto* 

11:40-12:00 OS14-7 Three-dimensional Global Stability and Coherent Structure of Turbulent Shear Flow <u>A. Yakeno</u>

13:10-13:50 OS14-8 *Invited* Discussion on High-Reynolds Number Limit in a Fully-Developed Channel Flow <u>Y. Yamamoto</u>, Y. Tsuji

13:50-14:30 OS14-9 Invited Wall Modeling in Large-Eddy Simulation: A Path to Predicting High Reynolds Number Flows S. Kawai

14:50-15:10 OS14-10 Entrainment and Diffusion Mechanism in a Round Jet Modified by Vortex Generators <u>Y. Ito</u>, K. Naganawa, Y. Sakai, K. Iwano

15:10-15:30 OS14-11 Influence of Compressibility on Turbulent/non-turbulent Interface in Supersonic Planar Jet <u>*R. Nagata, T. Watanabe, K. Nagata*</u> 15:30-15:50 OS14-12 Influence of Swirl on Coaxial Jets *P. Kadu, Y. Sakai, Y. Ito, K. Iwano, M. Sugino, T. Katagiri, T. Hayase* 

15:50-16:10 OS14-13 A Correction Method Based on Probability Density Function and Measurement Volume for Turbulence Intensity Profile Measured by LDV in Turbulent Pipe Flow <u>Y. Wada, N. Furuichi, E. Kusano, Y. Tsuji</u>

16:30-16:50 OS14-14 Enhancing Jet Turbulence and Acoustics via a Coupled LES -Stochastic Model *J. Blake, <u>A. Sescu</u>, D. Thompson, Y. Hattori* 

16:50-17:10 OS14-15 Vortex Structure and Aerodynamic Sound behind the Self-excited Vibrating Slit Flow <u>S. Kosako</u>, T. Tsuneyoshi, T. Ito, Y. Tsuji

17:10-17:30 OS14-16 Relationships between Small-Scale Motions and Inertial Particle Clustering in Turbulence: Comparison between Incompressible and Compressible Turbulence <u>Y. Sakurai, T. Ishihara</u>

17:30-17:50 OS14-17 Turbulence Closure Theory based on the Double-Lagrangian Formalism  $\underline{T. Ariki}$ 

<u>EX-2</u> November 9, 2018

9:00-9:20 OS14-18 Studies on Unsteady Turbulence Characteristics During Flow Transition Under Simulated Low Pressure Turbine Conditions Based on High-order LES Model <u>D. Biswas</u>

9:20-9:40 OS14-19 On Secondary Instability of Coherent Structure Artificially Excited in Two Dimensional Turbulent Channel Flow J. Takahashi, T. Mizuno, M. Matsubara

9:40-10:00 OS14-20 Numerical Investigations into Diurnal Wind Characteristics <u>Y. Song, L. Tian, N. Zhao</u>

10:00-10:20 OS14-21 Aerodynamic Effects of Offset between S-Duct Inlet and Flat Plate J. Lee, S. Baeg, J. Cho

10:40-11:10 OS14-22 Invited Control Forced Concurrent Precursor Method Applied to the LES of Turbulent Boundary Layers J.S. Haywood, <u>A. Sescu</u> 11:10-11:30 OS14-23 Large-eddy Simulation of Turbulent Hydrogen Flame in a Vitiated Co-flow <u>*Y. Hu, R. Kurose*</u>

11:30-11:50 OS14-24 Direct Numerical Simulation of Compressible Turbulence with Reactions and Rapid Temperature Growth <u>*R. Kuno, T. Ishihara*</u>