

## OS15: Turbulence: from Fundamentals to Applications

October 29, 2020

ROOM8 (Zoom Webinar)

OS15-1      **Quantification of The Intermittency Factor in Transitional Shear Flows Using Probability Density Function**

15:20-15:40      Tatsuya Tsumura, Tomoya Kikugawa, Masaharu Matsubara (Shinshu University, Japan)

OS15-2      **Identification of Vortex Structures in Flow using Tomographic PIV**

15:40-16:00      Kovid Bhatt, Tong Tong, Tatsuya Tsuneyoshi, Yoshiyuki Tsuji (Nagoya University, Japan)

OS15-3      **Pre-multiplied Spectra of Low Reynolds Number Large Motions in Channel Flow**

16:00-16:20      Wang Yu, Akinobu Nasuno, Ali Meherz, Tatsuya Tsuneyoshi, Yoshiyuki Tsuji (Nagoya University, Japan)

OS15-4      **Inviscid Limit Solution of 2D Navier-Stokes Equation on a Rotating Sphere With Hyper Viscosity**

16:20-16:40      Kiori Obuse (Okayama University, Japan), Michio Yamada (Kyoto University, Japan)

OS15-5      **Dissipation Extremes in High Reynolds Number Turbulence** (*Invited*)

17:10-17:50      Gerrit E. Elsinga (Delft University of Technology, The Netherlands), Takashi Ishihara (Okayama University, Japan), Julian C. R. Hunt (University College London, UK)

OS15-6      **Inter-scale Transfer of Turbulent Energy and Scalar in Grid Turbulence**

17:50-18:10      Yasumasa Ito, Takuya Yurikusa, Yasuhiko Sakai, Koji Iwano (Nagoya University, Japan), Yi Zhou (Nanjing University of Science and Technology, China)

OS15-7      **The Diagnostic Plot - Diagnosing and Scaling Turbulence Data**

18:10-18:30      Ramis Örlü, Antonio Segalini, P. Henrik Alfredsson (KTH, Sweden)

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OS15-8      **Predicting Jet Noise With a Coupled LES-Synthetic Turbulence Method**

15:20-15:40      Joshua Blake, Adrian Sescu, David Thompson (Mississippi State University, USA), Yuji Hattori (Tohoku University, Japan)

OS15-9      **Very-large Eddy Simulation of Turbulent Flow and Heat Transfer Around Turbine with Swirling Hot Streak**

15:40-16:00      Jie Zhou (Nanjing University of Aeronautics and Astronautics, China), Pengxiang Wan (Nanjing University of Aeronautics and Astronautics / Nanjing CRRC Puzhen Haitai Brake Equipment Co., Ltd, China), Xingsi Han, Junkui Mao (Nanjing University of Aeronautics and Astronautics, China)

- OS15-10      **Measurement of High Schmidt Number Scalar Mixing**  
16:00-16:20    Koji Iwano, Michihiro Suzuki, Yasuhiko Sakai, Yasumasa Ito (Nagoya University, Japan)
- OS15-11      **DNS Study of Annular Couette Flow for Low-High Radius Ratio in Subcritical Transition**  
16:20-16:40    Kazuki Takeda (Tokyo University of Science, Japan), Yohann Duguet (Université Paris-Saclay, France), Takahiro Tsukahara (Tokyo University of Science, Japan)
- OS15-12      **Perturbation Induced in a Boundary Layer by a Vortex Ring Hitting the Leading Edge of a Flat Plate**  
17:10-17:30    Kazuki Nanri, Masaharu Matsubara (Shinshu University, Japan)
- OS15-13      **Boundary Layers on Broad and Sharp Rotating Cones – a Comparison of Instability and Transition Scenarios**  
17:30-17:50    Kentaro Kato, Antonio Segalini, P. Henrik Alfredsson (KTH, Sweden), Rebecca J. Lingwood (Brunel University London, UK / KTH, Sweden)
- OS15-14      **Large-Eddy Simulation of Non-Homogeneous Turbulence Subjected to Sudden Distortion**  
17:50-18:10    Mohammed Afsar, Ioannis Kokkinakis, Sarah Stirrat (University of Strathclyde, UK)
- OS15-15      **Using Optimisation Techniques within a Rapid Distortion Theory Framework to Improve Trailing Edge Noise Predictions**  
18:10-18:30    Sarah Stirrat, Mohammed Afsar, Edmondo Minisci, Ioannis Kokkinakis (University of Strathclyde, UK)