

61st Workshop on "Investigation and Control of Transition to Turbulence"

Venue: Rm#802, Bld#East-4, the University of Electro-Communications (UEC), Chofu, Tokyo, Japan

September 20 (Wed.), 2017

Chairperson: Masaharu Matsubara (Shinshu University)

15:00-15:40 Reynolds stress transport by inter-scale interaction in turbulent rotating plane Couette flow

○Takuya Kawata (Tokyo University of Science), Henrik Alfredsson (KTH)

15:40-16:20 Decay of grid-generated turbulence and effects of weak fluid acceleration

○Hiroki Suzuki, Shinsuke Mochizuki (Yamaguchi University)

16:20-17:00 Transitional structures of a compressible square cylinder wake subjected to free-stream disturbance

○Yohei Inoue, Yuma Tasai, Tsuyoshi Kanuma, Hiroshi Maekawa (UEC)

17:00-17:30 Laboratory Tour

September 21 (Thu.), 2017

Chairperson: Ayumu Inasawa (Tokyo Metropolitan University, TMU)

9:30-10:20 Advanced fluid research on drag reduction in turbulence experiments (AFRODITE)

Invited Speaker: ○Jens H.M. Fransson (Royal Institute of Technology, KTH)

10:20-11:00 Relaminarization of turbulent Poiseuille flow by buoyancy force

○Koji Fukudome, Yoshifumi Ogami (Ritsumeikan University)

11:00-11:40 Robustness and universality of turbulent stripe

○Takahiro Tsukahara (Tokyo University of Science)

<Lunch>

Chairperson: Masahito Asai (Tokyo Metropolitan University)

13:20-14:10 Diagnosis of well-behaved turbulent boundary layers

Invited Speaker: ○Ramis Örlü (Royal Institute of Technology, KTH)

14:10-14:50 Wall pressure fluctuation in high-Re-number channel flow

○Ali Mehrz (Nagoya University), Yoshinobu Yamamoto (Yamanashi University),

Yoshiyuki Tsuji (Nagoya University)

14:50-15:30 Oscillatory instability of double layers of immiscible fluids in a rectangular cavity heated from below

○Jiro Mizushima (Doshisha University)

<Break>

Chairperson: Hiroshi Maekawa (University of Electro-Communications)

16:00-16:50 A Closer Look at the Process Whereby Wall Turbulence Develops Log-Law Overlap Layer

Invited Speaker: ○Michio Nishioka (Prof. Emeritus, Osaka Prefecture University)

16:50-17:30 Effect of uniform blowing/suction in spatially developing turbulent boundary layers

Yukinori Kametani (Univ. of Tokyo), Koji Fukagata (Keio Univ.), Ramis Örlü, Philipp Schlatter (KTH)

17:30-18:10 New scenario of turbulence theory and streak structure of wall turbulence

○Tsutomu Kambe (Former Professor, University of Tokyo)

<18:30- Party at University Center, UEC >

September 22 (Fri.), 2017

Chairperson: Masaharu Matsubara (Shinshu University)

9:30-10:20 Theoretical and data-enabled predictions of boundary-layer transition

Invited Speaker: ○Tamer Zaki (Johns Hopkins University)

10:20-11:00 Experiments on the stability of flow in a channel with riblets

○Ho Quang Huy, Masahito Asai (Tokyo Metropolitan University)

11:00-11:40 Inertia-induced transitions in Rayleigh-Benard convection confined by a horizontal magnetic field

○Yuji Tasaka, Takatoshi Yanagisawa, Megumi Akashi (Hokkaido University),

Tobias Vogt, Sven Eckert (HZDR)

<Lunch>

Chairperson: Yohei Inoue (University of Electro-Communications)

13:20-14:10 On the understanding of structured convection

Invited Speaker: ○Mohammad Zakir Hossain (University of Western Ontario)

14:10-14:40 Research experiences in Stanford university

○Tsuyoshi Kanuma (UEC)

14:40-15:10 Internship experiences in University of Science and Technology Beijing

○Hiroharu Matsubara (UEC)

15:10- Closing remarks (Hiroshi Maekawa, University of Electro-Communications)

September 23 (Sat.), 2017

Laboratory Tour (UEC/TMU)

Organizers: Yohei Inoue, Hiroshi Maekawa, Ayumu Inasawa, Yuji Tasaka, Nobumasa Sekishita, Masaharu Matsubara

**100th Anniversary Commemorative Event in UEC/
30th Anniversary Commemorative of the Workshop on
"Investigation and Control of Transition to Turbulence"**