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-Bénard 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”