Program of 3rd International Workshop on Cloud Turbulence

March 3-5, 2020, Hall, Building 4, Nagoya Institute of Technology

URL: http://comphys.web.nitech.ac.jp/cloud3

March 3

9:00 - 9:30		*Registration*
9:30 - 9:40		*Opening*
9:40 - 10:20	Grabowski	Diffusional growth of cloud droplets in homogeneous isotropic turbulence: DNS, scaled-up DNS, and stochastic model
10:20 - 10:40		*Coffee Break*
10:40 - 11:20	Chandrakar	Droplet size distributions in turbulent clouds: experimental evaluation of theoretical distributions
11:20 - 12:00	Saito	Scale dependence of droplet spectra broadening by stochastic condensation in a rising air parcel
12:00 - 14:00		*Lunch*
14:00 - 14:40	Rosa	Effects of two-way momentum coupling on the collision statistics of cloud droplets in turbulent flows
14:40 - 15:20	Onishi	Direct Lagrangian size-resolving simulation of droplet growth in cloud turbulence
15:20 - 15:40		*Coffee Break*
15:40 - 16:20	Watanabe	New insights into turbulence modulation by small particles obtained using point-particle and particle-resolved DNSs
16:20 - 17:00	Bhowmick	Numerical investigation of droplet micro-physical growth inside atmospheric clouds

March 4

9:00 - 9:40	Yeung	Extreme-scale computing for turbulence and turbulent mixing: status and future needs
9:40 - 10:20	Kobayashi	Subgrid-scale models based on coherent structures
10:20 - 10:40		*Coffee Break*
10:40 - 11:20	Tsuji	Universal property of velocity statistics in log-region of high-Re-number turbulent boundary layer
11:20 - 12:00	Malinowski	Turbulence kinetic energy dissipation rate in clouds: new estimates
12:00 - 12:10		*Photo Session*
12:10 - 14:00		*Lunch*
14:00 - 14:40	Schumacher	Dry and moist mesoscale convection and machine learning
14:40 - 15:20	Bec	Homogeneous turbophoresis of small heavy particles
15:20 - 15:40		*Coffee Break*
15:40 - 16:20	Hirata Onishi	Estimation of time-course core temperature and water loss in Human Models with Urban Micrometeorology Prediction
16:20 - 17:00	Bodenschatz	The Advanced Max Planck CloudKite: high-resolution airborne measurements in the atmosphere
18:30 - 20:30		*Banquet (Hotel Mielparque Nagoya)*

March 5

9:00 - 9:40	Shima	Predicting the morphology of ice particles in deep convection using the super-droplet method
9:40 - 10:20	Tajiri	MRI adiabatic-expansion-type cloud chamber experiments: measurements of atmospheric aerosols to act as CCN and INP
10:20 - 10:40		*Coffee Break*
10:40 - 11:20	Hoffmann	Bridging the gap between LES and DNS: A new subgrid-scheme for LES with Lagrangian Cloud Microphysics
11:20 - 12:00	Gorokhovski	Fragmentation in clouds and effects of intermittency in the sheared turbulence on a droplet acceleration; direct simulations and stochastic models on residual scales
12:00 - 14:00		*Lunch*
14:00 - 14:40	Ishihara	Vortex cluster structures and particle motions in high Reynolds number turbulence
14:40 - 15:20	Sato	Reseach of aerosol cloud interaction using the global scale simulation with explicit representation of cloud microphysics
15:20 - 15:30		*Closing*