

A3 Foresight Program

“Workshop on Vortex Dynamics and Turbulence”

Date : March 12th (Sat) – 14th (Mon), 2016

Venue : 3/12 Hotel Sun Okinawa
(1-5-15, Kumoji, Naha, Okinawa, Japan)
3/13-14 Okinawaken Seinen-kaikan
(2-15-23, Kume, Naha, Okinawa, Japan)

March 12th, 2016

10:00-12:00 **Discussion 1**
12:00-13:00 **Lunch**
13:00-17:00 **Discussion 2**
19:00- **Reception** (Venue: “Yotsu-take KUME” 「四つ竹 久米店」)

March 13th, 2016

09:00-09:30 **Registration**
09:30-09:40 **Opening: Yasumasa Nishiura** (Tohoku Univ.)
09:40-10:10 **Yoshifumi Kimura** (Nagoya Univ.) [Chair Sung-Ik Sohn]
Energy spectrum of a system of point vortices
10:10-10:40 **Sung-Ik Sohn** (Gangneung-Wonju National Univ.) [Chair Yoshifumi Kimura]
Investigation on the Self-similar Structure of Vortex Sheet Spirals
10:40-11:00 **Coffee Break**
11:00-11:30 **Jae Hong Pyo** (Kangwong National University) [Chair Yukio Kaneda]
A finite element dual singular function method to solve the Stokes equations including corner singularities
11:30-12:00 **Yukio Kaneda (Aichi Inst. Tech.)** [Chair Jae Hong Pyo]
Statistics in the Log-law region in DNS of turbulent channel flow
12:00-13:30 **Lunch**
13:30-14:30 **Short Communication by students:** [Chair Takashi Sakajo]
Takeshi Gotoda (Kyoto Univ.)
Anomalous Enstrophy Dissipation via Singular Vortex Dynamics
Yuwei Fan (Peking Univ.)
Moment model for dilute gas beyond the Fourier law
Tomoki Uda (Kyoto Univ.)
Numerical Computation for Vortex Patch Equilibria
Feng Yang (Peking Univ.)
Analysis of Riemann Problem for Hyperbolic Grad 13 moment equations
14:45-15:15 **Chuanju Xu** (Xiamen Univ.) [Chair Changhoon Lee]
A SVV spectral element method for large eddy simulations of turbulent flows
15:15-15:45 **Changhoon Lee** (Yonsei Univ.) [Chair Chuanju Xu]
Numerical Study of Particle-Turbulence Interactions
15:45-16:15 **Coffee Break**
16:15-16:45 **Takashi Ishihara** (Nagoya Univ.) [Chair Donghyun You]
Vortex Clusters and Their Time Evolution in High-Reynolds-Number Turbulence
16:45-17:15 **Donghyun You** (POSTECH) [Chair Takashi Ishihara]
Computational simulation of vortical dynamics over flapping flexible finite-span foils
19:00- **Banquet** (Venue: “SUM’s MAUI KUMOJI” 「サムズマウイ 久茂地店」)

March 14th, 2016

09:00-09:30	Hisashi Okamoto (Kyoto Univ.) Title(TBA)	[Chair Sun-Chul Kim]
09:30-10:00	Sun-Chul Kim (Chung-Ang Univ.) Point vortex dynamics on the hyperbolic sphere	[Chair Hisashi Okamoto]
10:00-10:30	Coffee Break	
10:30-11:00	Do Wan Kim (Inha Univ.) Perturbed Boundary Integral Method for Asymmetric Impinging Jets	[Chair Takashi Sakajo]
11:00-11:30	Takashi Sakajo (Kyoto Univ.) One-dimensional hydrodynamic model for cascade turbulence	[Chair Do Wang Kim]
11:30-11:40	Closing: Takashi Sakajo (Kyoto Univ.)	
11:40-13:00	Lunch	

Organizer Committee :

Takashi Sakajo (Kyoto University)
Sun-Chul Kim (Chung-Ang University)
Sung-Ik Sohn (Gangneung-Wonju National University)

This workshop is supported by :

- JSPS A3 Foresight Program (Japan Society for the Promotion of Science)
- National Natural Science Foundation of China (NSFC)
- National Research Foundation of Korea (NRF)