

Analytical and Computational Fluid Dynamics 2008

-- vortex flows, biological systems and related topics --

Department of Mathematics, Chung-Ang University

June 24-25, 2008

SCHEDULE

● Venue

- June 24~25, Rooms 9703(Lecture), 9701(Free Discussion)
Natural Sciences Building, Chung-Ang Univ.

● Opening Ceremony

- June 24, 9:50-10:00

● Plenary Talks

- **Hisashi Okamoto** (Kyoto Univ., Research Institute for Mathematical Sciences)
 - Title: The inviscid limit of steady-states of the Navier-Stokes equations
 - June 24 & 25, 10:00-10:50
- **Ming-Chih Lai** (National Chiao Tung Univ., Applied Mathematics)
 - Title: An immersed boundary method for the simulation of interfacial flows with insoluble surfactant
 - June 24 & 25, 14:00-14:50

● Invited Speakers

- **Kim, Do Wan** (Hanyang Univ., Applied Mathematics) - June 24 [11:00-11:30]
- **Jo, Tae-Chang** (Inha Univ., Mathematics) - June 24 [11:30-12:00]
- **Kim, Chongam** (Seoul National Univ., Mechanical and Aerospace Eng.) - June 24 [15:30-16:00]
- **Choi, Haecheon** (Seoul National Univ., Mechanical and Aerospace Eng.) - June 24 [16:00-16:30]
- **Kim, Yongsam** (Chung-Ang Univ., Mathematics) - June 24 [16:30-17:00]
- **Iima, Makoto** (Hokkaido Univ., Mathematics) - June 25 [11:00-11:30]
- **Sakajo, Takashi** (Hokkaido Univ., Mathematics) - June 25 [11:30-12:00]
- **Whang, Sungim** (NIMS., Mathematics) - June 25 [15:30-16:00]
- **Kim, Junseok** (Korea Univ., Mathematics) - June 25 [16:00-16:30]

- **Welcome Reception:** June 24, 17:30 (Details will be announced later)

	June 24 (Tue)	June 25 (Wed)
09:50-10:00	<i>Opening Ceremony</i>	
	Plenary Talk I, Chair: Kim, Sun-Chul	Plenary Talk III, Chair: Kim, Sun-Chul
10:00-10:50	Okamoto, Hisashi (Kyoto Univ., Research Institute for Math. Sciences) <i>The inviscid limit of steady-states of the Navier-Stokes equations I</i>	Okamoto, Hisashi (Kyoto Univ., Research Institute for Math. Sciences) <i>The inviscid limit of steady-states of the Navier-Stokes equations II</i>
10:50-11:00	Break: Coffee & Tea	Break: Coffee & Tea
	Invited Talk I, Chair: Lee, June-Yub	Invited Talk III, Chair: Lee, June-Yub
11:00-11:30	Fluid-structure interaction problems using the IFEM Kim, Do Wan (Hanyang Univ.)	A stability of free-flight using vortex: a universal mathematical structure Iima, Makoto (Hokkaido Univ.)
11:30-12:00	Strongly nonlinear long wave model for internal waves Jo, Tae-Chang (Inha Univ.)	Motion of a ring structure of coherent vortices on a sphere Sakajo, Takashi (Hokkaido Univ.)
12:00-14:00	Lunch	Lunch
	Plenary Talk II, Chair: Kim, Do Wan	Plenary Talk IV, Chair: Kim, Do Wan
14:00-14:50	Lai, Ming-Chih (National Chiao Tung Univ., Applied Mathematics) <i>An immersed boundary method for the simulation of interfacial flows with insoluble surfactant I</i>	Lai, Ming-Chih (National Chiao Tung Univ., Applied Mathematics) <i>An immersed boundary method for the simulation of interfacial flows with insoluble surfactant II</i>
14:50-15:30	Break: Coffee & Tea	Break: Coffee & Tea
	Invited Talk II, Chair: Jung, Eunok	Invited Talk IV, Chair: Jung, Eunok
15:30-16:00	Recent Progress in Limiting Strategy for Multi-dimensional Conservation Laws Kim, Chongam (Seoul N. Univ.)	Stationary solitary wave solutions of the forced KdV equation Whang, Sungim (NIMS)
16:00-16:30	Three-dimensional Vortical Structures around Gliding and Flapping Insects Choi, Haecheon (Seoul N. Univ.)	Detailed description of generalized surface tension formulation Kim, Junseok (Korea Univ.)
16:30-17:00	Numerical Study of Incompressible Fluid Dynamics with non-Uniform Density by the Immersed Boundary Method Kim, Yongsam (Chung-Ang Univ.)	
17:30-20:00	<i>Welcome Reception</i>	