

Workshop on

Kinetic Theory and Fluid Dynamics: From micro to macroscopic modeling

in honor of Yoshio Sone's 80th Birthday and Kazuo Aoki's 65th Birthday

Kyoto University (Rakuyu-Kaikan), Kyoto, Japan, May 26 – 28, 2016



Organized by

Department of Aeronautics and Astronautics, Kyoto University



Program Overview

	26 (Thu)	27 (Fri)	28 (Sat)
9:00 – 9:20	Registration		
9:20 – 9:30	Opening		
9:30 – 10:20	Tai-Ping Liu	Francois Golse	Irene Gamba
	Coffee Break		
10:40 – 11:30	Andres Santos	Takeru Yano	Takeshi Kataoka
11:40 – 12:30	Seung-Yeal Ha	Shih-Hsien Yu	Giovanni Russo
	Lunch		
14:10 – 15:00	Hiroshi Sugimoto	Satoshi Taguchi	
15:10 – 16:00	Aldo Frezzotti	Shugo Yasuda	
	Coffee Break		
16:20 – 17:10	Takaaki Nishida	Hailiang Li	
19:00 –		Banquet	

PROGRAM

26th, Thursday

9:00 - 9:20 *Registration*

9:20 - 9:30 *Opening* (S. Takata, Kyoto University)

Session chair: S. Takata

9:30 - 10:20 T.-P. Liu (Stanford University, USA & Academia Sinica, Taiwan)
Sone Manifold for Stationary Boltzmann Equation

Coffee Break

10:40 - 11:30 A. Santos (Universidad de Extremadura, Spain)
Hydrodynamics for granular flow at low density: Navier-Stokes and Burnett constitutive equations

11:40 - 12:30 S.-Y. Ha (Seoul National University, Korea)
Flocking dynamics of the particle, kinetic Cucker-Smale model in a random environment

Lunch

Session chair: T.-P. Liu

14:10 - 15:00 H. Sugimoto (Kyoto University, Japan)
Separation of Gas Mixture by the Thermal Transpiration through Porous Membrane

15:10 - 16:00 A. Frezzotti (Politecnico di Milano, Italy)
On the applicability of Diffuse Interface Models to evaporation and condensation flows description

Coffee Break

16:20 - 17:10 T. Nishida (Kyoto University, Japan)
Instabilities of compressible Poiseuille flow and traveling waves

27th, Friday

Session chair: S. Yasuda

9:30 - 10:20 F. Golse (Ecole Polytechnique, France)
A New Approach to Mean-Field Limits of Large Particle Systems

Coffee Break

10:40 - 11:30 T. Yano (Osaka University, Japan)
Long time behavior of nonlinear resonant gas oscillation with weak shock wave

11:40 - 12:30 S.-H. Yu (National University of Singapore, Singapore)
Layers for Viscous Conservation Laws and Boltzmann Equation

Lunch

Session chair: F. Golse

14:10 - 15:00 S. Taguchi (The University of Electro-Communications, Japan)
Slow flow of a rarefied gas past a spinning sphere

15:10 - 16:00 S. Yasuda (University of Hyogo, Japan)
Monte Carlo simulation for kinetic chemotaxis model of bacteria

Coffee Break

16:20 - 17:10 H. Li (Capital Normal University, China)
Spectrum structure and behaviors of Vlasov-Poisson(Maxwell)-Boltzmann equations

Banquet

The Banquet will be held on Friday evening from 19:00 at Kyoto Century Hotel, located close to the JR Kyoto Station (<http://www.kyoto-centuryhotel.co.jp/english/access/>).

28th, Saturday

Session chair: S. Taguchi

9:30 - 10:20 I. Gamba (University of Texas-Austin, USA)
Approximations to Vlasov-Poisson-Landau equations

Coffee Break

10:40 - 11:30 T. Kataoka (Kobe University, Japan)
Stability of internal wave beams to 3D perturbations

11:40 - 12:30 G. Russo (Università di Catania, Italy)
Semilagrangian schemes for the BGK model

12:35 *Closing* (S. Taguchi, The University of Electro-Communications)