## RIMS International Workshop 2016

# Workshop on the Boltzmann Equation, Microlocal Analysis and Related Topics

Date: 27th -- 29th May, 2016

Venue: Kyoto University Clock Tower Centennial Hall

Conference Room III (27th, 29th)

Internatinal Conference Hall I (28th)

#### **Program**

27th (Friday)

10:00--10:10 Welcome speech

Hisashi Okamoto (Kyoto University)

10:10--11:00

Hua Chen (Wuhan University)

Estimates of Dirichlet eigenvalues for degenerate elliptic operators

11:10--12:00

Karel Pravda-Starov (Université de Rennes 1)

Null-controllability of hypoelliptic quadratic differential equations (Lunch)

13:45--14:35

Yong-Kum Cho (Chung-Ang University)

Radial positive definite functions and the Boltzmann equation

14:45--15:35

Setsuro Fujiie (Ritsumeikan University)

Microlocal method for the semiclassical distribution of resonances (Coffee)

16:00--16:50

Huijiang Zhao (Wuhan University)

Global large solutions to a viscous heat-conducting

one-dimensional gas with temperature-dependent viscosity

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28<sup>th</sup> (Saturday)
9:30--10:20
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Radjesvarane Alexandre (Vietnum France University)

On homogeneous Landau equation for soft potentials

10:30--11:20

Takayoshi Ogawa (Tohoku University)

Global behavior of solutions to a drift-diffusion system in higher dimensions.

11:40--12:30

Yasunori Maekawa (Kyoto University)

On viscous incompressible flows around a rotating obstacle in two-dimensions

(Lunch)

14:00--14:50

Shuichi Kawashima (Kyushu University)

Discrete kinetic theory and hyperbolic balance laws

15:10--16:00

Chao-Jiang Xu (Université de Rouen and Wuhan University)

Microlocal analysis on partial differential equations

-- Some contributions by Yoshinori Morimoto

18:30--20:30 Banquet

Fortune Garden Kyoto, Cozy Room

29th (Sunday)

10:00--10:50

Chisato Iwasaki (University of Hyogo)

Precise construction of fundamental solutions for degenerate operators and their applications

11:10--12:00

Fumioki Asakura (Osaka Electro-Communication University)

Electromagnetic Shock Tube Problem --Ionization by a single shock

wave--

(Lunch)

13:45--14:35

Renjun Duan (The Chinese University of Hong Kong)

How Besov meets Boltzmann for well-posedness

14:45--15:35

Shinya Nishibata (Tokyo Institute of Technology)

Outflow/inflow problems to symmetric hyperbolic-parabolic systems (Coffee)

16:00--16:50

Tong Yang (City University of Hong Kong)

Measure value solutions to the Boltzmann equation

16:50-17:00 Closing speech

Yoshio Tsutsumi (Kyoto University)

### Organizers

Hisashi Okamoto (Kyoto University)

Yoshio Tsutsumi (Kyoto University)

Naomasa Ueki (Kyoto University)

Senjo Shimizu (Kyoto University, Chair)

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