

JSPS/SAC SEMINAR, MARCH 25-26, 2021: ON GAS KINETIC/DYNAMICS AND LIFE SCIENCE

Zoom link: <https://chalmers.zoom.us/j/67249934656>
Password: 925923

Program

MARCH 25, 9:00-13:00 (Sweden)/17:00-21:00 (Japan)

Opening remarks

9.00-9.05– Director of JSPS Stockholm Office Dr. Tadaharu Tsumoto

9.05-9.10– Professor Bernt Wennberg

Presentations

Session 1: 9.10-10.30 (Chair: Professor Imre Pázsit)

K1: 9.10-10.00–Professor Shigeru TAKATA; Plenary speaker
(Kyoto Univ., Graduate School of Engineering, Dept of Aeronautics and Astronautics)

Some attempts on the simple kinetic modeling of dense gases with phase changes

C1: 10.00-10.30– Professor Tünde FÜLÖP
(Chalmers, Dept of Physics; Subatomic, High Energy and Plasma Physics),
Kinetic modelling of runaway electrons in cooling plasmas

10.30-10.45– Paus

Session 2: 10.45-11.45 (Chair: Professor Kazuo Aoki)

K2: 10.45-11.15– Associate Professor Tetsuro TSUJI
(Kyoto Univ., Dept of Advanced Mathematical Sciences)

Numerical analysis of a rarefied gas flow around a sphere induced by an abrupt onset of self-rotation

K3: 11.15-11.45–Assistant Professor Masanari HATTORI
(Kyoto Univ., Graduate School of Engineering, Dept of Aeronautics and Astronautics) *Sound waves propagating in a slightly rarefied gas over a smooth solid boundary*

11.45-12.00– Paus

Session 3: 12.00-13:00 (Chair: Professor David Cohen)

C2: 12.00-12:30–Associate Professor Philip GERLEE

(Chalmers, Mathematical Sciences)

Finite size effects in diffusive public goods games

C3: 12:30-13:00– Professor Larisa BEILINA

(Chalmers, Mathematical Sciences)

An adaptive finite element method in non-invasive monitoring of hyperthermia



MARCH 26, 9:00-10:00 (Sweden)/17:00-18:00 (Japan)

Session 4: 9.00-10.00 (Chair: Professor Shigeru Takata)

K4: 9.00-9.30– Post-Doc Kai KOIKE
(Kyoto Univ., Graduate School of Engineering, Faculty of Engineering)
Long-time behavior of a point particle moving in a 1D viscous compressible fluid

K5: 9.30-10.00– Associate Professor Hiroki TANAKA
(Kyoto Univ., Institute for Integrated Radiation and Nuclear Science)
Present status of accelerator-based neutron source for boron neutron capture therapy in Kyoto University.

10.00-12.00– Break

(due to the Sweden-Japan Academic Network meeting at that time)

The meeting is open to the public, but one has to register by 25 March. The program is available under

<https://www.jsps-sto.com/event/sjan2021/>

where one can register and also finds the link to the meeting.

MARCH 26, 12.00-14.05 (Sweden)/20.00-22:05 (Japan)

Session 5: 12.00-14.05 (Chair: Professor Mohammad Asadzadeh)

C4: 12.00-12.30–PhD student Barbara Maria SCHNITZER
(Chalmers, Mathematical Sciences)

Pin pin korori in yeast: mathematical modelling of ageing, cellular rejuvenation and healthy lifespan

C5: 12.30-13.00– Associate Professor Tobias GEBÄCK
(Chalmers, Mathematical Sciences)

Multiscale modeling of HPLC chromatography columns - homogenization and lattice Boltzmann simulations

C6: 13.00-13.30– Professor Torbjörn LUNDH
(Chalmers, Mathematical Sciences)

Relation between the shape of a wound and its healing time

C7: 13.30-14.00– Professor Anders LOGG
(Chalmers, Mathematical Sciences)

Digital Twin Cities

Final remarks & Closing

14.00-14.05–Professor Mohammad Asadzadeh

Organizers: JSPS Stockholm Office & Mathematical Sciences,
Chalmers University of Technology and University of Gothenburg

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