Czech Academy of Sciences–Kanazawa University Workshop

Shiinoki Cultural Complex, Kanazawa City, Ishikawa, Japan
November 2–3, 2025

Time	Title of Talk / Speaker / Affiliation
09:50–10:00	Masato Kimura, Kanazawa University
10:00–10:50	*Weak solutions to a full compressible magnetohydrodynamic flow interacting with thermoelastic structure and singular limits* Šárka Nečasová, Institute of Mathematics, Czech Academy of Sciences
10:50–11:05	*Non-axisymmetric tornado-type flow: energy transfer and dynamics* Afifah Maya Iknaningrum, Kanazawa University
11:05–11:20	Break
11:20–11:35	*A variable time step Lagrange – Galerkin scheme with second-order accuracy in time for convection-diffusion problems* Yuki Karasawa, Kanazawa University
11:35–11:50	*Dynamics of the wave-pinning model for cell polarity* Taikei Uechi, Kanazawa University
11:50–12:20	*A rate-independent model of droplet evolution* Norbert Pozar, Kanazawa University
12:20–14:00	Lunch Break
14:00–14:30	*3 topics on many-particle limits* Patrick van Meurs, Kanazawa University
14:30–15:20	*Analysis of bi-fluid systems* Martin Kalousek, Institute of Mathematics, Czech Academy of Sciences
15:20–15:35	Break
15:35–15:50	*On the memory of the twin vortex computer for an optimized cylinder* Yuma Nakamura, Kanazawa University
15:50–16:40	*On compressible fluids with shear dependent viscosity* Václav Mácha, Institute of Mathematics, Czech Academy of Sciences
16:40–16:55	Break
16:55–17:45	*On dissipative turbulent solutions to the compressible anisotropic Navier – Stokes equations in unbounded domains* Ondřej Kreml, Institute of Mathematics, Czech Academy of Sciences

Table 1: Day 1 Schedule

Time	Title of Talk / Speaker / Affiliation
09:30–10:20	*Equilibrium state of the 3D MHD equations with an arbitrary geometry* Hideo Kozono, Waseda University & Tohoku University
10:20–10:35	*Parameter identification in elliptic PDEs using the coupled complex boundary method with Tikhonov regularization* Sahat Pandapotan Nainggolan, Kanazawa University
10:35–10:50	*Fracture phase field model with unilateral contact condition: energy dissipation identity and finite element simulations* Oussama Ounissi, Kanazawa University
10:50–11:05	Break
11:05–11:20	*Lagrangian – Galerkin moving mesh method* Kharisma Surya Putri, Kanazawa University
11:20–12:10	*Numerical modelling of human phonation process* Jan Valášek, Institute of Mathematics, Czech Academy of Sciences
12:10–14:00	Lunch Break
14:00–14:30	*Well-posedness of the Langmuir film model* Koya Sakakibara, Kanazawa University
14:30–15:20	*Stability of bifurcating patterns in viscous compressible fluids* Yoshiyuki Kagei, Institute of Science Tokyo
15:20–15:35	Break
15:35–16:25	*Spatially adaptive stabilized Lagrange – Galerkin schemes for two-fluid flow and fluid – structure interaction problems* Hirofumi Notsu, Kanazawa University
16:25–16:30	Hirofumi Notsu, Kanazawa University
16:30–18:00	Project / Free Discussion

Table 2: Day 2 Schedule