

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

Table 1: Day 1 Schedule

Time	Title of Talk / Speaker / Affiliation
09:30–10:20	<i>Equilibrium state of the 3D MHD equations with an arbitrary geometry</i> <u>Hideo Kozono</u> , Waseda University & Tohoku University
10:20–10:35	<i>Parameter identification in elliptic PDEs using the coupled complex boundary method with Tikhonov regularization</i> <u>Sahat Pandapotan Nainggolan</u> , Kanazawa University
10:35–10:50	<i>Fracture phase field model with unilateral contact condition: energy dissipation identity and finite element simulations</i> <u>Oussama Ounissi</u> , Kanazawa University
10:50–11:05	Break
11:05–11:20	<i>Lagrangian – Galerkin moving mesh method</i> <u>Kharisma Surya Putri</u> , Kanazawa University
11:20–12:10	<i>Numerical modelling of human phonation process</i> <u>Jan Valášek</u> , Institute of Mathematics, Czech Academy of Sciences
12:10–14:00	Lunch Break
14:00–14:30	<i>Well-posedness of the Langmuir film model</i> <u>Koya Sakakibara</u> , Kanazawa University
14:30–15:20	<i>Stability of bifurcating patterns in viscous compressible fluids</i> <u>Yoshiyuki Kagei</u> , Institute of Science Tokyo
15:20–15:35	Break
15:35–16:50	<i>TBA</i> <u>Naohiko Ogawa</u> , Kanazawa University
15:50–16:40	<i>Spatially adaptive stabilized Lagrange – Galerkin schemes for two-fluid flow and fluid – structure interaction problems</i> <u>Hirofumi Notsu</u> , Kanazawa University
16:40–16:45	<i>Closing Remarks</i> , <u>Hirofumi Notsu</u> , Kanazawa University
16:45–18:00	Project / Free Discussion

Table 2: Day 2 Schedule