

30 August 2022 (Day1)

Time (JST)	#	Speaker	Title
8:45-9:00			Opening

Session 1A (Chair: T.-H. Watanabe)

Time (JST)	#	Speaker	Title
9:00-9:30	1A-1	S. V. Luedtke	VPIC 2.0: Performance-Portable Particle-in-Cell for Present and Future Supercomputers
9:30-10:00	1A-2	Y. Matsumoto	Particle-in-cell simulations for elucidating cosmic-ray accelerations in the exascale computing era
10:00-10:15	1A-3	Gahyung Jo	A New Gyrokinetic Hyperbolic Solver with Discontinuous Galerkin Method in Tokamak Geometry
10:15-10:30	1A-4	J. U. Chen	An h-adaptive HDG Scheme for Incompressible Magnetohydrodynamics
10:30-10:45	1A-5	T. Shiroto	The Structure and Structure-Preserving Discontinuous Galerkin Scheme for the Multispecies Rosenbluth-Fokker-Planck Equation

Session 1B (Chair: F. Jenko)

Time (JST)	#	Speaker	Title
17:00-17:30	1B-1	R. Keppens	When Hot Meets Cold: Recent Progress In Solar Flare Modeling
17:30-17:45	1B-2	Y. Kawazura	Ultrahigh Resolution Shearing-box Simulation of Magnetorotational Turbulence
17:45-18:00	1B-3	Dong Wu	Particle-in-cell modelling for head-on collisions of large-scale high density plasmas jets
18:00-18:15	1B-4	Xiangliang Kong	Modeling the acceleration and transport of nonthermal electrons in solar flares based on macroscopic MHD simulations
18:30-18:45	1B-6	Y. Nakajima	Stability Analysis of Counter-differential Rigid-rotation Equilibria of Electrically Non-neutral Two-fluid Plasmas Using PIC Simulation

31 August 2022 (Day2)

Session 2A (Chair: Z. Lin)

Time (JST)	#	Speaker	Title
9:00-9:30	2A-1	I. Farcas	Enabling Uncertainty Quantification In Predictive Plasma Turbulence Simulations
9:30-9:45	2A-2	M. Nunami	Hyper-dimensional manifold optimization for turbulent plasma transport
9:45-10:00	2A-3	Y. Chen	Evolution of the marker distribution in gyrokinetic δf particle-in-cell simulations
10:00-10:15	2A-4	Y. Idomura	Performance portable full-f gyrokinetic simulations on exascale supercomputers

10:15-10:30	2A-5	J. H. Nicolau	Gyrokinetic Simulations Of The Helically-Trapped Electron Mode In W7-X Stellarator
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Session 2B (Chair: T. Amano)

Time (JST)	#	Speaker	Title
17:00-17:30	2B-1	Jun Ma	Development of a full MHD eigenvalue code with the use of symbolic computation technique
17:30-19:00	P-1 ~ P-47		Poster session on "Remo"

1 September 2022 (Day3)

Session 3A (Chair: R. Horiuchi)

Time (JST)	#	Speaker	Title
9:00-9:30	3A-1	M. Iwamoto	3D PIC simulation of coherent emission from relativistic shocks
9:30-11:00	P-1 ~ P-47		Poster session on "Remo"

Session 3B (Chair: A. Kageyama)

Time (JST)	#	Speaker	Title
17:00-17:30	3B-1	H. Hotta	Solar differential rotation reproduced with high-resolution magnetohydrodynamic simulations
17:30-17:45	3B-2	Taiki Jikei	Alfvén Mach number dependence on ion Weibel instability in collisionless shock transition regions: Effect of magnetized electrons
17:45-18:00	3B-3	T. Minoshima	A Quasi All-speed Scheme for MHD Flows in a Wide Range of Mach Numbers
18:00-18:15	3B-4	R. Horiuchi	Guide-field dependence of a merging process of two spherical-tokamak-type plasmoids
18:15-18:30	3B-5	J. Croonen	General geometry 2D implicit PIC model
18:30-18:45	3B-6	K. Iwata	Multidimensional study of thermonuclear burning wave triggering sub-Chandrasekhar mass Type Ia supernovae
18:45-19:00	3B-7	G. Lapenta	Modeling and visualization of planetary environments using the Energy Conserving Semi Implicit method (ECSIM) and ML

2 September 2022 (Day4)

Session 4A (Chair: L. Chacon)

Time (JST)	#	Speaker	Title
9:00-9:30	4A-1	C. Huang	Modeling of Coherent Synchrotron Radiation Effects in High Brightness Beams via a Novel Particle-mesh Method and Surrogate Models with Symplectic Neural Networks
9:30-9:45	4A-2	T. G. Jenkins	A Kinetics-only Delta-f (KODF) Method for RF Wave Modeling in Warm Plasma
9:45-10:00	4A-3	S. Maeyama	New algorithm for solving sheared flows in local flux-tube gyrokinetic simulations

10:00-10:15	4A-4	G. Chen	An implicit, conservative and asymptotic-preserving electrostatic particle-in-cell algorithm for strongly magnetized plasmas
10:15-10:30	4A-5	H. Wang	The first nonlinear simulation of Alfvén eigenmode in CFQS
10:30-10:45	4A-6	X. Zhao	Particle energization in the vicinity of an O-point: numerical and analytical investigations
10:45-11:00	4A-7	O. Koshkarov	Enabling optimizations for reduced kinetic spectral models

Session 4B (Chair: Y. Todo)

Time (JST)	#	Speaker	Title
17:00-17:30	4B-1	E. Narita	Machine-Learning Assistance With Nonlinear Gyrokinetic Simulations By Recognizing Wavenumber-Space Images
17:30-17:45	4B-2	T. Singh	Global Gyrokinetic Simulations of Electrostatic Microturbulence Transport Using Kinetic Electrons in LHD Heliotron
17:45-18:00	4B-3	A. Ishizawa	Saturation mechanism of ion temperature gradient driven turbulence in finite beta tokamaks studied by global gyrokinetic simulation
18:00-18:15	4B-4	Shi-Jie Liu	Calculation of collisionless pitch-angle scattering of runaway electrons with synchrotron radiation via high-order guiding-center equation
18:15-18:30	4B-5	Y. Morishita	Simulation Study of LHD Plasma Control Applying Data Assimilation System ASTI
18:30-18:45	4B-6	J. S. Kalita	UNDERSTANDING SUBCRITICAL TURBULENCE IN 3D YUKAWA LIQUIDS USING LARGE SCALE MOLECULAR DYNAMICS SIMULATIONS