## ISSS-15 + IPELS-16

## Monday 5 August 2024

#### Plenary: 1 (09:00 - 10:15)

time [id] title		presenter
09:00 [131] Welcome & Introduction		JENKO, Frank
09:15 [135] The ESA M7 candidate n	nission Plasma Observatory	MARCUCCI, Maria Federica
09:45 [125] Kinetic Properties of the Explored Through Theory and	Reconnection Electron Diffusion Region, Experiment	EGEDAL, Jan

#### Plenary: 2 (10:45 - 12:15)

time [id] title	presenter
10:45 [127] Energy partition in collisionless shocks	FIUZA, Frederico
11:15 [136] 4th-Order Accurate Methods for Relativistic MHD with Finite Conductivit	/ MIGNONE, Andrea
11:45 [68] Bridging the gap between fluid and kinetic simulations	AMANO, Takanobu

## Tuesday 6 August 2024

### Plenary: 3 (09:00 - 10:15)

time	[id] title	presenter
09:00	[130] Going beyond MHD: New Developments in Space Environment Modeling	GOMBOSI, Tamas
	[56] Paradigmatic liquid-metal experiments on geo- and astrophysical phenomena	STEFANI, Frank

#### Plenary: 4 (10:45 - 12:15)

time	[id] title	presenter
	[109] How non-equilibrium thermodynamics constrains magnetohydrodynamics in dilute astrophysical plasmas	KUNZ, Matthew
	[103] Properties of the generation and propagation of whistler-mode chorus emissions in the Earth's inner magnetosphere	KATOH, Yuto
11:45	[58] Field inference with information field theory	ENSSLIN, Torsten

# Wednesday 7 August 2024

### <u>Plenary: 5</u> (09:00 - 10:15)

time [id] title		presenter
	[124] New insights into the inner machinery of collisionless magnetic reconnection	HESSE, Michael
09:45	[128] The plasma physics of the Galaxy's most extreme particle accelerators	REVILLE, Brian

#### Plenary: 6 (10:45 - 12:15)

time	[id] title	presenter
10:45	[59] Recent Observation of Waves in Laboratory Reconnection Experiments	YOO, Jongsoo
	[79] Particle acceleration/heating of high guide field reconnection in merging spherical tokamak formation experiments	TANABE, Hiroshi
11:45	[92] Structure-preserving semi-implicit particle-in-cell schemes for the VlasovMaxwell system	KORMANN, Katharina

## Thursday 8 August 2024

### <u>Plenary: 7</u> (09:00 - 10:15)

time	[id] title	presenter
09:00	[101] Overview of the Basic Plasma Science Facility	CARTER, Troy
	[94] Application of space simulations to atmospheric escape studies from terrestrial planets	SEKI, Kanako

#### Plenary: 8 (10:45 - 12:15)

time [id] title		presenter
	[64] Effects of spontaneously-generated and artificially-controlled electrostatic fields in high guide-field magnetic reconnection in laboratory experiment	INOMOTO, Michiaki
11:15	[134] Cosmic Rays and Magnetic Fields in the Local Universe	DOLAG, Klaus
11:45	[138] Bringing together HPC and QC: it is mainly a software challenge!	SCHULZ, Martin

# Friday 9 August 2024

### Plenary: 9 (09:00 - 10:15)

time [id] title		presenter
	[117] Accelerating Fusion Plasma Collision Operator Solves with Portable Batched Iterative Solvers on GPUs	Prof. ANZT, Hartwig
	[105] It's Not Easy Being Green: Quantitative Modeling of Aurora-like Picket Fence Emissions Driven by Local Ionospheric Parallel Electric Fields	GASQUE, L. Claire

### <u>Plenary: 10</u> (10:45 - 12:30)

time	[id] title	presenter
	[77] 2D PIC simulation of particle acceleration in oblique pickup ion mediated shocks	MATSUKIYO, Shuichi
	[126] Particle Acceleration during Three-Dimensional Turbulent Magnetic Reconnection	Prof. HOSHINO, Masahiro
11:45	[139] Highlights from the path toward confined e+e- pair plasmas	STENSON, Eve
12:15	[140] Closing remarks	JENKO, Frank