

Tuesday 7 November 2023

Time Note: EST is UTC - 5 and JST is UTC + 9	Talk Number	Speaker	Title
Session 1: Code Development Chair: Christian Boily; Zoom host: Tomoyuki Hanawa			
UTC 08:00 - 08:15 EST 03:00 - 03:15 JST 17:00 - 17:15	1	Christian Boily	Opening remarks
UTC 08:15 - 08:30 EST 03:15 - 03:30 JST 17:15 - 17:30	2	Simon Portegies Zwart	New AMUSE developments
UTC 08:30 - 08:45 EST 03:30 - 03:45 JST 17:30 - 17:45	3	Arun Mathew	New Multi-Ion Chemical Kinetics Modeling: Simulating Interstellar Shockwaves and Synthetic Emission Maps
UTC 08:45 - 09:00 EST 03:45 - 04:00 JST 17:45 - 18:00	4		
UTC 09:00 - 09:15 EST 04:00 - 04:15 JST 18:00 - 18:15	5	Daria Turichina	Faster, bigger and with layers: a challenge of implementing yet another scattering code for spheroidal particles in astrophysical applications
UTC 09:15 - 09:30 EST 04:15 - 04:30 JST 18:15 - 18:30	6	Sarah Casura	Towards automated structural analysis of galaxies in large imaging surveys
UTC 09:30 - 09:45 EST 04:30 - 04:45 JST 18:30 - 18:45	7	Michaela Brchneleva	Rapid global coronal modelling with COCONUT: current status and outlook
UTC 09:45 - 10:00 EST 04:45 - 05:00 JST 18:45 - 19:00	8	Frank Wagner	Survey of Astrophysics Simulation Codes in Germany: An Initiative of the PUNCH4NFDI Consortium
Session 2: High Energy and Plasma Chair: Edouard Audit; Zoom host: Dmitri Wiebe			
UTC 13:00 - 13:45 EST 08:00 - 08:45 JST 22:00 - 22:45	9	Bhargav Vaidya	Probing Particle Acceleration Processes in Astrophysical and Space Plasma Environments
UTC 13:45 - 14:00 EST 08:45 - 09:00 JST 22:45 - 23:00	10	Prasanta Bera	Relativistic Oblique Shocks: Transition from Regular to Mach Reflection
UTC 14:00 - 14:15 EST 09:00 - 09:15 JST 23:00 - 23:15	11	Biplob Sarkar	Magnetized dissipative accretion flow onto a rotating black hole with hydrodynamical winds and thermal conduction
UTC 14:15 - 14:30 EST 09:15 - 09:30 JST 23:15 - 23:30	12	Fatameh Kayanikhoo	Magnetic energy dissipation in astrophysical MHD simulations: results of the Orszag-Tang test problem
UTC 14:30 - 14:45 EST 09:30 - 09:45 JST 23:30 - 23:45	13	Ilya Kondratyev	2D simulations of magnetorotational supernova explosions with violated mirror symmetry
UTC 14:45 - 15:00 EST 09:45 - 10:00 JST 23:45 - 00:00	14	Daniela Maci	BxC toolkit: toward tailored 3D turbulent magnetic field realizations
UTC 15:00 - 15:15 EST 10:00 - 10:15 JST 00:00 - 00:15	15	Mitra Samik	Shock induced GRMHD accretion flows around black holes
Session 3: High Energy and Plasma Chair: Gustavo Yepes; Zoom host: Shazrene Mohamed			
UTC 20:00 - 20:45 EST 15:00 - 15:45 JST 05:00 - 05:45 (+ 1 day)	16	David Radice	Numerical Relativity and Compact Binary Mergers
UTC 20:45 - 21:00 EST 15:45 - 16:00 JST 05:45 - 06:00	17	Agnieszka Janiuk	Collapsing massive stars with self-gravitating disk accretion
UTC 21:00 - 21:15 EST 16:00 - 16:15 JST 06:00 - 06:15	18	Nikita	Simulating Ribs and Tethers in AGN jets
UTC 21:15 - 21:30 EST 16:15 - 16:30 JST 06:15 - 06:30	19	Karol Fulat	Kinetic simulations of non-relativistic high-Mach-number shocks propagating in a turbulent medium
UTC 21:30 - 21:45 EST 16:30 - 16:45 JST 06:30 - 06:45	20	Gerardo Urrutia	Following the interaction of a Short GRB Jet with a post-merger outflow
UTC 21:45 - 22:00 EST 16:45 - 17:00 JST 06:45 - 07:00	21	Gabriel Torralba Paz	Energetic particle analysis in PIC simulations using neural networks

Wednesday 8 November 2023			
Time Note: EST is UTC - 5 and JST is UTC + 9	Talk Number	Speaker	Title
Session 4: Stars, Star Clusters Chair: Gustavo Yepes; Zoom host: Tomoyuki Hanawa			
UTC 08:00 - 08:45 EST 03:00 - 03:45 JST 17:00 - 17:45	22	Hideyuki Hotta	High-resolution simulations of solar convection zone
UTC 08:45 - 09:00 EST 03:45 - 04:00 JST 17:45 - 18:00	23	Tinatin Baratashvili	Icarus: a new highly optimized heliospheric model for forecasting purposes
UTC 09:00 - 09:15 EST 04:00 - 04:15 JST 18:00 - 18:15	24	Giuliano Iorio	SEVN: a new multi purpose rapid population synthesis code
UTC 09:15 - 09:30 EST 04:15 - 04:30 JST 18:15 - 18:30	25	Andrei Fionov	Quantum algorithms for stellar dynamics modelling
UTC 09:30 - 09:45 EST 04:30 - 04:45 JST 18:30 - 18:45	26	Mary Dethero	Overshooting, filling factors, and plume dynamics with the MULTIdimensional Stellar Implicit Code (MUSIC)
UTC 09:45 - 10:00 EST 04:45 - 05:00 JST 18:45 - 19:00	27	Giovanni Lapenta	Modelling the role of electrons within kinetic models of large astrophysical systems
Session 5: Galaxy, Cosmology Chair: Christian Boily; Zoom host: Tomoyuki Hanawa			
UTC 13:00 - 13:15 EST 08:00 - 08:15 JST 22:00 - 22:15	28	Sauraj Bharti	HI stacking predictions for upcoming surveys with SKA precursors
UTC 13:15 - 13:30 EST 08:15 - 08:30 JST 22:15 - 22:30	29	Devika Bhatnagar	Deep Learning Methods to Model the Large-Scale Structure of the Universe
UTC 13:30 - 13:45 EST 08:30 - 08:45 JST 22:30 - 22:45	30	Swati Gavas	Local Insights into the Hubble Tension using Cosmological N-body Simulation
UTC 13:45 - 14:00 EST 08:45 - 09:00 JST 22:45 - 23:00	31	Dipanweeta Bhattacharyya	Expected locations of merging binary black holes
UTC 14:00 - 14:15 EST 09:00 - 09:15 JST 23:00 - 23:15	32	Salvador Grmozzi	Reconstructing the merger trees and tracking the assembly histories of MW-like halos in the ARTEMIS simulations
UTC 14:15 - 14:30 EST 09:15 - 09:30 JST 23:15 - 23:30	33	Hitesh Kishore Das	Multiphase gas in a Turbulent medium, with a pinch of magnetic fields
UTC 14:30 - 14:45 EST 09:30 - 09:45 JST 23:30 - 23:45	34	Anastasia Avtaeva	Kinetic model of the stellar wind forcing on the extended hydrogen atmosphere of the exoplanet π Men c
UTC 14:45 - 15:00 EST 09:45 - 10:00 JST 23:45 - 00:00	35		
Session 6: High Energy, Plasma, and Code Development Chair: Dmitri Wiebe; Zoom host: Shazrene Mohamed			
UTC 20:00 - 20:15 EST 15:00 - 15:15 JST 05:00 - 05:15 (+ 1 day)	36	Jonathan Mackey	Performance and scaling of PION code for modelling Colliding-Wind Binary systems
UTC 20:15 - 20:30 EST 15:15 - 15:30 JST 05:15 - 05:30	37	Sergey Savchenko	On the segmentation of Galactic cirri
UTC 20:30 - 20:45 EST 15:30 - 15:45 JST 05:30 - 05:45	38	Fabio De Colle	CFD-Optimization: a new approach to computational astrophysics
UTC 20:45 - 21:00 EST 15:45 - 16:00 JST 05:45 - 06:00	39	Jean-Mathieu Teissier	Estimating numerical viscosity and magnetic diffusivity of high-order magnetohydrodynamics solvers
UTC 21:00 - 21:15 EST 16:00 - 16:15 JST 06:00 - 06:15	40	Ruben Cabezon	SPH-EXA: bringing computational astrophysics to exascale
UTC 21:15 - 21:30 EST 16:15 - 16:30 JST 06:15 - 06:30	41	Maitraya Bhattacharyya	A finite element method in angle for relativistic radiation transport on spherical geodesic grids
UTC 21:30 - 21:45 EST 16:30 - 16:45 JST 06:30 - 06:45	42	Olga Kochina	PRESTALINE: GORYNYCH (CAMELUNG + PRESTA + URANIA)
UTC 21:45 - 22:00 EST 16:45 - 17:00 JST 06:45 - 07:00	43	Ilyas Sultanov	MHD Modeling of the Molecular Filament Evolution with the Flash Code

Thursday 9 November 2023

Time Note: EST is UTC - 5 and JST is UTC + 9	Talk Number	Speaker	Title
Session 7: Galaxy, Cosmology			
Chair: Jonathan Mackey; Zoom host: Pratika Dayal			
UTC 08:00 - 08:45 EST 03:00 - 03:45 JST 17:00 - 17:45	44	Eugene Vassiliev	Galactic dynamics with AGAMA
UTC 08:45 - 09:00 EST 03:45 - 04:00 JST 17:45 - 18:00	45	Sandeep Kumar Kataria	The role of inner halo angular momentum on bar formation and evolution
UTC 09:00 - 09:15 EST 04:00 - 04:15 JST 18:00 - 18:15	46	Ankit Kumar	Characteristics of bulgeless galaxies in Illustris TNG simulation
UTC 09:15 - 09:30 EST 04:15 - 04:30 JST 18:15 - 18:30	47	Iliia Chugunov	An analytical model of spiral arms in photometric decomposition of galaxies
UTC 09:30 - 09:45 EST 04:30 - 04:45 JST 18:30 - 18:45	48	George Gontcharov	Using big data for reddening and extinction maps and models
Session 8: Star Formation			
Chair: Michiko Fujii; Zoom host: Jonathan Mackey			
UTC 13:00 - 13:45 EST 08:00 - 08:45 JST 22:00 - 22:45	49	Stefanie Walch-Gassner	Modelling the multi-phase interstellar medium
UTC 13:45 - 14:00 EST 08:45 - 09:00 JST 22:45 - 23:00	50	Eduard Vorobyov	ngFEOSAD - Coarray-parallelized 3D numerical hydrodynamics code on nested meshes to study self-gravitating gas-dust protoplanetary disks
UTC 14:00 - 14:15 EST 09:00 - 09:15 JST 23:00 - 23:15	51	Vitaliy Grigoryev	Simulation of the falling of a compact clump on a protoplanetary disk
UTC 14:15 - 14:30 EST 09:15 - 09:30 JST 23:15 - 23:30	52	Yuliya Gladysheva	Aeronomical model of hydrogen-helium upper atmospheres of hot jupiters
UTC 14:30 - 14:45 EST 09:30 - 09:45 JST 23:30 - 23:45	53	Tatiana Demidova	Simulation of clump decay in the rotating protoplanetary disk
UTC 14:45 - 15:00 EST 09:45 - 10:00 JST 23:45 - 00:00	54	Michiko Fujii	Closing remarks