

The Talk Schedule MHD-PP 2022

Wednesday, October 12

Session I. Numerical Methods for Hydrodynamics Equations & Poisson Solvers

Novosibirsk Time	Moscow Time	Vienna Time	New York Time	Talk
15:00	11:00	10:00	04:00	Feodoritova O.B., Novikova N.D., Zhukov V.T. Development of numerical methodology for transient conjugate heat transfer in multicomponent flows (INVITED)
15:30	11:30	10:30	04:30	Botchev M.A., Zhukov V.T. Comparison of time integration methods for solving nonlinear heat conduction problems (INVITED)
16:00	12:00	11:00	05:00	Vorobyov E., McKeivitt J., Kulikov I., Elbakyan V. Computing the gravitational potential on nested Cartesian meshes using the convolution method (INVITED)
16:30	12:30	11:30	05:30	Discussion & Coffee-Break

Session II. High Performance Computing

Novosibirsk Time	Moscow Time	Vienna Time	New York Time	Talk
17:00	13:00	12:00	06:00	Bastrakova M.V., Kulandin D.S., Lapteva T., Vozhakov V.A., Linirov A.V. Genetic Algorithm for Searching Bipolar Single-Flux-Quantum Pulse Sequences for Qubit Control (INVITED)
17:30	13:30	12:30	06:30	Rodimkov Yu., Volokitin V., Meyerov I., Efimenko E. Towards ML-based diagnostics of focused laser pulse (INVITED)
18:00	14:00	13:00	07:00	Snytnikov A.V., Lazareva G.G. Verification and Validation of KI-1 plasma simulation code (INVITED)
18:30	14:30	13:30	07:30	Discussion & Coffee-Break

Session III. Numerical Modeling in Astrophysics and in Earth Physics

Novosibirsk Time	Moscow Time	Vienna Time	New York Time	Talk
19:00	15:00	14:00	08:00	Toropina O.D., Bisnovatyi-Kogan G.S., Moiseenko S.G. MHD Simulation of Laboratory Jets in a Toroidal Magnetic Field (INVITED)
19:30	15:30	14:30	08:30	Levina G.V. Cloud-resolving numerical modeling of hurricane-like quasi-tropical cyclones over the Black Sea (INVITED)
20:00	16:00	15:00	09:00	Kondratyev I.A., Moiseenko S.G. Semi-implicit numerical method for differentially rotating compressible astrophysical flows (INVITED)
20:30	16:30	15:30	09:30	Sarkar S., Chattopadhyay I., Debnath S. Imprints of spin on the solution and emission spectrum of accretion flows around black holes (INVITED)
21:00	17:00	16:00	10:00	Discussion & Coffee-Break

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Session IV. High Performance Computing

Novosibirsk Time	Moscow Time	Vienna Time	New York Time	Seminar of Siberian Supercomputer Center
15:00	11:00	10:00	04:00	Coarray Fortran in Applications. Speakers: Kulikov I.M., Lazareva G.G. & Okishev V.A.

Friday, October 14

Session V. Particle-in-cell method in Physics of Plasma

Novosibirsk Time	Moscow Time	Vienna Time	New York Time	Talk
15:00	11:00	10:00	04:00	Chernoshtanov I.S., Efimova A.A., Soloviev A.A., Vshivkov V.A. Fast ion-ion collisions simulation in particle-in-cell method (INVITED)
15:30	11:30	10:30	04:30	Dudnikova G.I., Vshivkov V.A., Boronina M.A., Efimova A.A., Chernoshtanov I.S., Vshivkov K.V. Numerical simulation of beam injection into an open magnetic trap (INVITED)
16:00	12:00	11:00	05:00	Efimova A., Dudnikova G., Voropaeva E., Vshivkov K. New algorithm for solving relativistic equations of charged particles motion
16:30	12:30	11:30	05:30	Discussion & Coffee-Break

Session VI. Numerical Modeling in Physics of Plasma

Novosibirsk Time	Moscow Time	Vienna Time	New York Time	Talk
17:00	13:00	12:00	06:00	Kozlov A.N., Klimov N.S., Gutorov K.M., Konovalov V.S., Kovalenko D.V., Podkovyrov V.L., Yaroshevskaya A.D. Calculation of radiation characteristics in the ionizing gas flow for the KSPU-T installation (INVITED)
17:30	13:30	12:30	06:30	Maksimova A.G. Calculation of the parameters of tungsten vapor under pulsed heat load
18:00	14:00	13:00	07:00	Taiurskii A.A. Numerical study of the influence of plasma inhomogeneity with bremsstrahlung and photorecombination radiation on the absorption of an Alfvén wave (INVITED)
18:30	14:30	13:30	07:30	Discussion & Coffee-Break
19:00	15:00	14:00	08:00	Brushlinskii K.V., Stepin E.V. Mathematical model and numerical simulation of equilibrium plasma configurations in "Threeleaf" magnetic traps (INVITED)
19:30	15:30	14:30	08:30	Oksoyeva I.P., Lazareva G.G. Mathematical modeling of plasma transport in a spiral magnetic field
20:00	16:00	15:00	09:00	Belyaeva Yu.O. Classical stationary solutions to the Vlasov-Poisson system (INVITED)
20:30	16:30	15:30	09:30	Lazareva G.G. Mathematical Simulation of the Distribution of the Electron Beam Current in Tungsten Vapor during Pulsed Heating of a Metal Target (INVITED)
21:00	17:00	16:00	10:00	Kulikov I.M. Workshop review talk