

CCP2016

Monday 11 July 2016

Parallel Track A: Astrophysics and Space Physics, Plasma, Gravitation and Cosmology: Astrophysics and Space Physics, Plasma, Gravitation and Cosmology - Spartan 1 (11:00-13:00)

-Conveners: Boris Rybakin

time	[id] title	presenter
11:00	[50] INVITED SPEAKER: Computational modeling of cosmic rays in the neighbourhood of the Sun	Prof. POTGIETER, Marius
11:30	[31] INVITED SPEAKER: Computational Heliospheric Physics; A South African Perspective	Dr STRAUSS, Du Toit
12:00	[14] Computational Morphometric Analysis in Astrophysics and Cosmology	Dr ROSA, Reinaldo
12:20	[20] Running mean techniques of extracting observed frequencies in Kepler red giant stars	Mr ABEDIGAMBA, Patrick Oyirwoth
12:40	[32] Ultrahigh-energy neutrino events in current and future neutrino telescopes from nearby Gamma-Ray Bursts	Dr MOHARANA, Reetanjali

Parallel Track A: Astrophysics and Space Physics, Plasma, Gravitation and Cosmology: Astrophysics and Space Physics, Plasma, Gravitation and Cosmology - Spartan 1 (14:00-16:15)

-Conveners: Reinaldo Rosa

time	[id] title	presenter
14:00	[76] Simulating the synchrotron emission from Active Galactic Nuclei jets with grid based relativistic hydrodynamic code	Mr VAN DER WESTHUIZEN, Izak
14:20	[36] Computer simulation of the process of defragmentation and ablation of mass during the interaction of shock waves with molecular clouds	Prof. RYBAKIN, Boris
14:40	[107] Particle Remapping with Deformation Tracking for Collisionless Fluid Flow	ANDREW, Myers
15:00	[78] Simulating cosmic ray modulation over a solar cycle	Mr MOHLOLO, Timothy

Tuesday 12 July 2016

Parallel Track A: Astrophysics and Space Physics, Plasma, Gravitation and Cosmology: Statistical Physics, Complex Systems and Nonlinear Dynamics (09:30-10:40)

-Conveners: David Landau

time	[id] title	presenter
09:30	[27] INVITED SPEAKER: Quantum vs classical optimization: A status update on the arms race	Prof. KATZGRABER, Helmut G.
10:00	[77] INVITED SPEAKER: Massively parallel Monte Carlo simulations with population annealing	Dr WEIGEL, Martin

Parallel Track A: Astrophysics and Space Physics, Plasma, Gravitation and Cosmology: Statistical Physics, Complex Systems and Nonlinear Dynamics (11:00-13:00)

-Conveners: Srikanth Sastry

time	[id] title	presenter
11:00	[25] Phase transition approach to bursting in neuronal cultures : Quorum Percolation models	Dr MONCEAU, Pascal
11:20	[9] Development of a simulated computer modelling of laser treatment for coronary heart disease	Mr KABEYA, Francois
11:40	[8] Synchronization on Complex Networks	Prof. PARK, Hyunggyu
12:20	[59] Random Field Ising Models: Fractal Morphologies and their Implications	Prof. BANERJEE, Varsha
12:40	[29] Canonical and Non-Canonical Ising Spin Glass on Randomly Rewired Regular Lattices	Dr SURUNGAN, Tasrief

Parallel Track A: Astrophysics and Space Physics, Plasma, Gravitation and Cosmology: Statistical Physics, Complex Systems and Nonlinear Dynamics (14:00-15:40)

-Conveners: Martin Weigel

time	[id] title	presenter
14:00	[12] INVITED SPEAKER: Replica Exchange Wang-Landau Simulation of Lattice Protein Folding Funnels	Prof. LANDAU, David
14:30	[57] INVITED SPEAKER: The yielding transition in amorphous solids	Prof. SASTRY, Srikanth
15:00	[116] The Schrödinger equation on a Lagrange mesh	Prof. RAMPHO, Gaotsiwe Joel
15:20	[102] Discontinuous transition in a suppressed random cluster growth model	Prof. SANTRA, Sitangshu Bikas

Wednesday 13 July 2016

Parallel Track A: Astrophysics and Space Physics, Plasma, Gravitation and Cosmology: Astrophysics and Space Physics, Plasma, Gravitation and Cosmology (10:15-12:15)

-Conveners: Amare Abebe; Romeel Dave

time	[id] title	presenter
10:15	[53] INVITED SPEAKER: Modelling the progenitors and environments of stellar explosions	Dr MOHAMED, Shazrene
10:45	[35] INVITED SPEAKER: The role of kinetic scales: particle acceleration from shocks and reconnection	Dr KILIAN, Patrick
11:15	[2] Dust heating by Alfvén waves using non-Maxwellian distribution function	Dr KIRAN, Zubia
11:35	[21] An asymptotic preserving scheme for the Vlasov-Maxwell system in the classical limit	Dr EINKEMMER, Lukas
11:55	[92] Large Scale Fully Kinetic 3D PIC Simulation for the Awake Collaboration	Mr MOSCHUERING, Nils

Parallel Track A: Astrophysics and Space Physics, Plasma, Gravitation and Cosmology: Astrophysics and Space Physics, Plasma, Gravitation and Cosmology (12:15-13:00)

-Conveners: Zubia Kiran; Romeel Dave

time	[id] title	presenter
12:15	[48] PIC simulation of scattering and absorption of an ultraintense short-pulse laser in a finite-size plasma	Dr KARGARIAN, Ameneh
12:35	[4] UCLA Particle-in-Cell and Kinetic Simulation Software Center for Plasma Simulation	Dr DECYK, Viktor

Parallel Track A: Astrophysics and Space Physics, Plasma, Gravitation and Cosmology: Parallel Track A (14:00-16:00)

-Conveners: Predrag Cvitanovic

time	[id] title	presenter
14:00	[30] Chaplygin-gas Solutions of $f(R)$ Gravity	Ms ELMARDI, Maye
14:20	[65] Computation of ion potential for simulation of nonequilibrium warm dense matter	Prof. RAMAZANOV, Tlekkabul
14:40	[66] Screened interaction potentials between compound particles for simulation of complex plasmas	Mr MOLDABEKOV, Zhandos
15:00	[43] The effect of a warm electron beam on fast electron-acoustic nonlinear potential structures in multi-electron species plasmas	Mr MBULI, Lifa Nicholas
15:20	[26] Shear-free Anisotropic Cosmological Models in $f(R)$ Gravity	Dr ABEBE, Amare

Thursday 14 July 2016

Parallel Track A: Astrophysics and Space Physics, Plasma, Gravitation and Cosmology: Fluid Dynamics, Oceanography and Climate modelling, Geophysics and Geomechanics (09:00-10:10)

-Conveners: Irvy (Igle) Gledhill

time	[id] title	presenter
09:00	[120] INVITED SPEAKER: From carbon speciation to transport properties of carbon rich liquids of the upper mantle from molecular dynamics simulations	Prof. VUILLEUMIER, Rodolphe
09:30	[62] Efficient parallelization of scientific computer codes: Two case studies using the PGAS programming model	Ms PRUGGER, Martina
09:50	[68] Entropic Multi-Relaxation Time Lattice Boltzmann Model for Complex Flows	Mr DORSCHNER, Benedikt

Parallel Track A: Astrophysics and Space Physics, Plasma, Gravitation and Cosmology: Fluid Dynamics, Oceanography and Climate modelling, Geophysics and Geomechanics (10:30-10:50)

-Conveners: Predrag Cvitanovic; Irvy (Igle) Gledhill

time	[id] title	presenter
10:30	[69] Textured superhydrophobic surfaces: Reducing contact time of an impinging drop	Dr CHIKATAMARLA, Shyam

Parallel Track A: Astrophysics and Space Physics, Plasma, Gravitation and Cosmology: Astronomy 3rd session (10:50-11:10)

-Conveners: Romeel Dave

time	[id] title	presenter
10:50	[126] INVITED SPEAKER: Simulating the formation of the first galaxies and black holes in the Universe	Prof. DI MATTEO, Tiziana