

SAIP2012

Tuesday 10 July 2012

Theoretical (11:00-12:20)

-Conveners: Frederik Scholtz

time	[id] title	presenter
11:00	[287] On the analytic properties of the Jost function	Mr MVONDO-SHE, Yannick
11:20	[482] Parametrization of scattering data using genetic algorithm	Mr OGUNBADE, Prince Olusegun
11:40	[266] A study of resonant- and bound-state dependence on the variables of a step-potential for a quantum mechanical system by making use of the Jost Functions	Mr VAANDRAGER, Paul

Theoretical (14:30-15:50)

-Conveners: Azwinndini Muronga

time	[id] title	presenter
14:30	[464] Analysis of four-body breakup reactions using Faddeev-Yakubovsky formalism	Prof. LEKALA, Mantile
14:50	[494] Two-body electrodisintegration of ^4He with antisymmetrized molecular dynamics	Prof. RAMPHO, Gaotsiwe Joel
15:10	[64] A resolution of the cosmological constant problem	Dr GREBEN, Jan
15:30	[262] Applications of Space Geodesy in tests of general relativity	Prof. COMBRINCK, Ludwig

Wednesday 11 July 2012

Theoretical (08:00-09:20)

-Conveners: Jan Greben

time	[id] title	presenter
08:00	[84] Analytical techniques for noise filtering in quantum logic gates	Dr UYS, Hermann
08:20	[280] Derivation of the quantum-bit-error rate for the BB84 protocol based on the phase-covariant-cloning machine	Mr MAFU, Mhlambululi
08:40	[423] Monitoring the State of a Single Quantum System	Mr GARAPO, Kevin
09:00	[61] Non-Hermitian approach to the dissipative dynamics of two-level system	Dr ZLOSHCHASTIEV, Konstantin

Theoretical (10:55-11:55)

-Conveners: Frederik Scholtz

time	[id] title	presenter
10:55	[171] Steady state behaviour in an interacting bipartite Gaussian system	Dr GHESQUIERE, Anne
11:15	[536] Theoretical & Computational Physics Division Group Meeting	Prof. SCHOLTZ, Frederik

Theoretical (16:30-17:50)

-Conveners: Daniel Joubert

time	[id] title	presenter
16:30	[198] Efficiency of Open Quantum Walk implementation of the Dissipative Quantum Computing	Dr SINAYSKIY, Ilya
16:50	[199] The role of the initial system-bath correlations in the dynamics of open quantum systems	Dr SEMIN, Vitalii
17:10	[187] Dissipative Dynamics of a Spinless Electron Strongly Interacting with the Environment of Spinless Electrons	Mr MWALABA, Michael
17:30	[270] Decoherence-assisted transport in quantum networks	Ms MARAIS, Adriana Dr SINAYSKIY, Ilya

Thursday 12 July 2012

Theoretical (08:00-09:20)

-Conveners: Thomas Konrad

time	[id] title	presenter
08:00	[103] Critical exponents and the extensive nature of statistical entropy	Dr SALAGARAM, Trisha
08:20	[49] Entropic entanglement criteria for fermion systems	Dr ZANDER, Claudia
08:40	[74] Stochastic wave-function unravelling of the generalized Lindblad equation using correlated states	Mr NSIO NZUNDU, Tony
09:00	[145] Control in boson-boson dynamics through long time scale discontinuities	Dr GIRALDI, filippo

Theoretical (11:00-12:20)

-Conveners: Izak Snyman

time	[id] title	presenter
11:00	[404] Sufficient condition for an array of beam splitters to distinguish d-photon antisymmetric state	Dr GOYAL, Sandeep
11:20	[422] Unsharp measurement in Quantum Mechanics and its realization	Dr CHOUDHARY, Sujit Kumar
11:40	[118] Computation of the anomalous dimension of ABJM theory	Mr KEMP, Garreth Mr NOKWARA, Nkululeko
12:00	[151] From Large N Nonplanar Anomalous Dimensions to Open Spring Theory	Mr KEMP, Garreth

Theoretical (14:10-15:30)

-Conveners: Kristian Müller-Nedebock

time	[id] title	presenter
14:10	[212] The double coset ansatz for integrability in AdS/CFT	Prof. DE MELLO KOCH, Robert
14:30	[259] Non Supersymmetric Large N Background for Two Yang-Mills Coupled Matrices	Dr ZAIDI, Alia
14:50	[97] Two Loop Dilatation Operator in $\langle i \rangle N \langle /i \rangle = 4$ SYM	Ms SMITH, Stephanie
15:10	[185] Geometries of quantum systems: Towards an AdS / Quantum Mechanics correspondence	Mr VAN ZYL, Hendrik

Theoretical (16:00-17:20)

-Conveners: Robert de Mello Koch

time	[id] title	presenter
16:00	[4] KMS states	Ms BARNES, Gwendolyn
16:20	[265] Biofilaments in assays of molecular motors: collective effects and the role of geometry	Prof. MÜLLER-NEDEBOCK, Kristian
16:40	[332] Topological equivalence of polymers: regular isotopy in a projection geometry	Mr ROHWER, Chris

Friday 13 July 2012

Theoretical (08:00-09:20)

-Conveners: Mantile Lekala

time	[id] title	presenter
08:00	[510] Equilibration of hot and dense nuclear matter	Mr THOVHOGI, Tshilidzi
08:20	[47] Light flavor symmetry breaking for heavy baryons	Mr BLANCKENBERG, Jaco
08:40	[439] Progress in Thermodynamics and Electrodynamics of Relativistic Fluids	Prof. MURONGA, Azwinndini
09:00	[481] Followup on the Monte Carlo simulation of MUSR using GEANT 4	Mr HARTMAN, Jonathan

Theoretical (11:00-12:20)

-Conveners: Gaotsiwe Joel Rampho

time	[id] title	presenter
11:00	[451] Fermi edge singularity and finite frequency spectral features in a semi-infinite 1D wire	Dr SNYMAN, Izak
11:20	[102] Mapping Kohn-Sham eigenenergies onto vertical ionization energies	Prof. JOUBERT, Daniel
12:00	[271] Structural and Electronic Properties of ZnO: a hybrid density functional study	Mr MOLEPO, Mahlaga