SAIP2013

Tuesday 09 July 2013

Theoretical (10:30-12:10)

-Conveners: Kristian Müller-Nedebock

| time | [id] title | presenter |
|-------|---|-------------------------|
| 10:30 | [90] The March 2015 total solar eclipse and its potential for testing the General Theory of Relativity | Prof. COMBRINCK, Ludwig |
| | [551] Preliminary site survey for a laser interferometer gravitational-wave observatory (LIGO) for South Africa | Prof. COMBRINCK, Ludwig |
| 11:10 | [269] Investigation of Phase Transitions in Tungsten Trioxide | Mr GOVENDER, Malcolm |

Theoretical (14:10-15:10)

Theoretical (15:40-16:40)

Wednesday 10 July 2013

Theoretical (09:00-10:00)

-Conveners: Frederik Scholtz

| time [id] title | presenter |
|---|-------------------|
| 09:00 [184] Three-body Bound state calculations | Mr MUKERU, Bahati |
| 09:20 [583] DIVISION MEETING | |

Theoretical (10:30-11:50)

-Conveners: Thomas Konrad

| time | [id] title | presenter |
|-------|--|---------------------------------------|
| 10:30 | [451] Modelling the stability of a semiflexible network tethered to a membrane | Prof. MÜLLER-NEDEBOCK, Kristian |
| 10:50 | [6] Concavity of energy surfaces | Prof. KARATAGLIDIS, Steven |
| 11:10 | [75] Heavy Baryons with Strangeness | Mr BLANCKENBERG, Jaco |
| 11:30 | [505] Finite-size key in QKD protocols for Renyi entropies | Mr MAFU, Mhlambululi |

Theoretical (13:50-15:10)

-Conveners: Francesco Petruccione

| time [id] title | presenter |
|--|------------------------------|
| 13:50 [365] The Emergence of Gravitational Spaces | Mr MOOLMAN, Simon |
| 14:10 [186] Simulating Black-Hole Radiation. | Mr CARLSON, Warren |
| 14:30 [188] Black-Hole Pulsar Binaries: Simulations on the Grid. | Mr CARLSON, Warren |
| 14:50 [568] Nuclear Matter Equation of State and the Neutron Stars | Prof. MURONGA, Azwinndini |

Theoretical (15:40-16:40)

-Conveners: Azwinndini Muronga

| time | [id] title | presenter |
|-------|---|----------------------|
| 15:40 | [524] Quantum Teleportation of photonic multi-level systems | Prof. KONRAD, Thomas |
| | [509] Nitrogen-Vacancy colour centre in diamond characterization using QUANTUM ESPRESSO | Mr ZULU, Bheki |
| 16:20 | [463] Quantum Measurements Along Accelerated World-Lines | Mr HARTMAN, Jonathan |

Friday 12 July 2013

<u>Theoretical</u> (09:00-10:00)

-Conveners: Frederik Scholtz

| time [id] title | presenter |
|--|-------------------|
| 09:00 [260] Quantum teleportation, quantum scissor and quantum transcription | Dr GOYAL, Sandeep |
| 09:20 [258] Scalable implementation scheme for quantum walks using classical light | Dr GOYAL, Sandeep |

<u>Theoretical</u> (10:30-11:50)

-Conveners: Steven Karataglidis

| time [id] title | presenter |
|---|----------------------|
| 10:50 [262] A review of generalized and unsharp measurements | Ms BASSA, Humairah |
| 11:10 [274] NON-SPECIALIST: Classical optics in the language of quantum mechanics | Prof. KONRAD, Thomas |