

Research Workshop on Dissipative Quantum
Computing and State Engineering
NITheP-KZN and
School of Chemistry and Physics, UKZN
H-Block, Seminar Room (3rd Floor)
25-28 September 2012

Program

Tuesday, 25 September

- 9¹⁵ – 9⁴⁵ Registration and Tea/Coffee
- 9⁴⁵ – 10⁰⁰ Opening
- 10⁰⁰ – 12⁰⁰ Eugene S. Polzik (Niels Bohr Institute, Copenhagen University), Dissipative entanglement engineering with magnetic and mechanical oscillators.
- 12³⁰ – 14⁰⁰ Lunch
- 14⁰⁰ – 16⁰⁰ Uwe Dorner (NUS and University of Oxford), Quantum Metrology with Photons and Atoms
- 16⁰⁰ – 16³⁰ Tea/Coffee
- 16³⁰ – 17⁰⁰ Discussion.
- 17⁰⁰ – 20⁰⁰ Braai (Welcome reception)

Wednesday, 26 September

- 9³⁰ – 10⁰⁰ Tea/Coffee
- 10⁰⁰ – 12⁰⁰ Ilya Sinayskiy (NITheP and UKZN), Dissipative preparation of W states in Optical Cavities
- 12³⁰ – 14⁰⁰ Lunch
- 14⁰⁰ – 19⁰⁰ Conference excursion and dinner at Tala Game Reserve. The shuttle bus to Tala Game Reserve will depart from the School of Chemistry and Physics, UKZN.

Thursday, 27 September

9³⁰ – 10⁰⁰ Tea/Coffee

10⁰⁰ – 12⁰⁰ Klaus Mølmer (University of Aarhus), TBA

12³⁰ – 14⁰⁰ Lunch

14⁰⁰ – 16⁰⁰ Thomas Barthel (LMU Munich), Simulatability and quasi-locality for Markovian quantum dynamics

16⁰⁰ – 16³⁰ Tea/Coffee

16³⁰ – 17³⁰ Discussion.

Friday, 28 September

9³⁰ – 10⁰⁰ Tea/Coffee

10⁰⁰ – 12⁰⁰ Francesco Petruccione (NITheP and UKZN), Open Quantum Walks

12³⁰ – 14⁰⁰ Lunch

14⁰⁰ – 16⁰⁰ Discussion

16⁰⁰ – 16³⁰ Tea/Coffee

Please note that there will be a shuttle bus between UKZN and the Benjamin Hotel, as well as between UKZN and Invubu Guesthouse.