

BergeFest 2014 Programme | 22-25 April 2014, Singapore

22 April, Tuesday

- 09:00 **Welcome and Opening Addresses**
- 09:15 **Serge Haroche, École Normale Supérieure, Paris, France**
Controlling photons in cavities
- 10:00 **Gerd Leuchs, Max-Planck Institute for Science of Light, Erlangen, Germany**
Time reversal symmetry in optics
- 10:30 **Coffee/Tea Break**
- 11:00 **Wilhelm Becker, Max-Born Institute of Berlin, Germany**
Atoms in intense laser field: light at the end of the tunnel
- 11:30 **Michael Fleischhauer, University of Kaiserslautern**
Rydberg polaritons: Photons with non-local interactions
- 12:00 **Giovanna Morigi, Saarland University, Saarbrücken , Germany**
Quantum reservoir engineering of photons and atoms
- 12:30 **Lunch**
- 14:00 **Andreas Buchleitner, University of Freiburg, Germany**
Quantum statistics vs interference in many-particle scattering
- 14:30 **Christian Miniatura, CQT, NUS, Singapore**
Momentum signatures of Anderson localization
- 15:00 **Coffee/Tea Break**
- 15:30 **Jaroslav Řeháček, Palacký University, Olomouc, Czech Republic**
Quantum tomography of beams: Wavefront sensing reveals optical coherence.
Springer Lecture Notes in Physics lecture.
- 16:00 **Zdeněk Hradil, Palacký University, Olomouc, Czech Republic**
What can we learn from tomography in optics
- 16:30 **Luis Sanchez Soto, Complutense University of Madrid, Spain**
Title to be advised

23 April, Wednesday

- 09:00 **Helmut Rauch, Vienna University of Technology, Austria**
Neutrons reveal quantum phenomena
- 09:30 **Jun Suzuki, The University of Electro-Communications, Tokyo, Japan**
Wave-particle duality in quantum estimation theory
- 10:00 **Lev Vaidman, Tel Aviv University, Israel**
Bohr, von Neumann, Wheeler, Aharonov, Bohm and Englert: Where was the photon which passed through an interferometer?
- 10:30 **Coffee/Tea Break**
- 11:00 **Daniel Greenberger, The City College Of New York, USA**
Title to be advised
- 11:30 **Dagomir Kaszlikowski, CQT, NUS, Singapore**
The notorious “quantum non-locality” in a different way.
- 12:00 **Dagmar Bruss, Heinrich-Heine-Universität Düsseldorf, Germany**
Designing Bell Inequalities
- 12:30 **Lunch**
- 14:00 **Ulrike Herzog, Humboldt-University Berlin, Germany**
Optimal strategies for discriminating qubit states
- 14:30 **Thomas Durt, Institute FRESNEL, Marseille, France**
Would a quantum system succumb to its own gravitation?
- 15:00 **Coffee/Tea Break**

24 April, Thursday

- 09:00 **Reinhard Werner, Leibniz Universität Hannover, Germany**
Bohmian encounters
- 09:30 **Ruediger Schack, Royal Holloway, University of London Egham, UK**
QBism, or what quantum mechanics says about the world
- 10:00 **Ulrich Mohrhoff, Sri Aurobindo International Centre of Education, Pondicherry, India**
How to manifest a world
- 10:30 **Coffee/Tea Break**
- 11:00 **Kwek Leong Chuan, CQT, NUS, Singapore**
Quantum metrology with photonic polarization gears
- 11:30 **Ady Mann, Technion-Israel Institute of Technology, Isreal**
Quantum mechanical retrodiction through an extended mean king problem
- 12:00 **Karol Życzkowski, Jagiellonian University, Crakow, Poland**
Stronger entropic uncertainty relations
- 12:30 **Lunch**
- 14:00 **Free Afternoon**

25 April, Friday

- 09:15 **Roy Glauber, Harvard University, Cambridge, MA, USA**
Title to be advised
- 10:00 **Kazimierz Rzążewski, Center for Theoretical Physics of the Polish Academy of Science, Warsaw, Poland**
Classical fields and quantum measurement of Bose-Einstein condensate
- 10:30 **Coffee/Tea Break**
- 11:00 **Marek Kus, Center for Theoretical Physics of the Polish Academy of Science, Warsaw, Poland**
Geometry of multiparticle entanglement
- 11:30 **Miguel Orszag, Pontificia Universidad Catolica de Chile, Santiago, Chile**
Propagation and distribution of quantum correlations
- 12:00 **Saverio Pascazio, Universita di Bari, Italy**
Typicality in the interference of Bose-Einstein condensates
- 12:30 **Lunch**
- 14:00 **Alexander Ling, CQT, NUS, Singapore**
Entangled Photon Sources for Space
- 14:30 **Enrique Solano, University of the Basque Country, Bilbao, Spain**
Quantum Theatre of Impossible Physics
- 15:00 **Coffee/Tea Break**
- 15:30 **Luigi Amico, University of Catania**
Local response of topological order to an external perturbation
- 16:00 **Heinz Siedentop, Ludwig-Maximilians-Universität München, Germany**
Large Atoms and Their Momentum Density