GERMAN BGU WORKSHOP ON QUANTUM TECHNOLOGY

Dec. 6, 2018 Dekel Hall, Ben Gurion University
Beer Sheva, Israel

By invitation only

PROGRAM

9:15 Gathering and refreshments

9:40 Welcome: Prof. Dan Blumberg, Vice President of Research and Development, BGU
     Prof. Shlomi Arnon, Director, BGU Center for Quantum Science and Technology

10:00 Prof. Carsten Henkel, University of Potsdam
     Selling randomness? -- What quantum mechanics does not tell us

10:15 Prof. Ron Folman, BGU
     Atoms: from fundamental science to technology

10:30 Dr. Andrea Alberti, University of Bonn
     Atom transport at the quantum speed limit

10:45 Prof. Ibrahim Abdulhalim, BGU
     Exciting localized by extended plasmons as a methodology to obtain higher efficiency quantum sources and detectors

11:00 Dr. Francesco Intravaia, Humboldt University, Berlin
     Conservative and non-conservative dispersion forces

11:15 Coffee break

11:35 Prof. Shlomi Arnon, BGU
     Quantum key distribution in free space optics

11:50 Dr. Paulo Santos, Paul-Drude Institute, Berlin
     Dynamic photon control using acoustic fields.

12:05 Dr. Yehuda Band
     Quantum Rotors: Magnetometry and Accelerometry

12:20 Prof. Achim Peters, Humboldt University, Berlin
     Mobile atom interferometry and sounding rocket experiments testing robust quantum sensor technology
12:35  Lunch

Collaboration opportunities

13:40: Representatives of BGU R&D Authority

14:10: Dr. Billy Shapiro, Helmholtz Association

14:30: Vera Shifferman, DAAD

14:50 – 15:20  Tour of the Atom Chip laboratory of  Prof. Ron Folman

15:20 Coffee break

15:35 Dr. Avishay Carmi, BGU
   How quantum mechanics solves the barber paradox

15:50 Robert Joerdens, Quartig
   Languages, meta-programmable Logic, and control infrastructure for quantum Information

16:05 Prof. Doron Cohen, BGU:
   Metastability of condensates in atomtromic circuits

16:20 Dr. Tim Schroeder, Humboldt University
   Solid-state spin qubits in nanophotonic Interfaces for quantum information processing.

16:35 Dr. Or Sattath
   On preparing ground states of gapped Hamiltonians: an efficient quantum Lovász local lemma

16:50 Dr. Andreas Wicht, Humboldt University
   Micro-integrated diode laser modules for quantum sensor applications in space.

17:05 Dr. Christian R. Mueller-Hirschkorn, Max Planck Institute for the Science of Light
   TBA

17:15 – 17:45 Group discussion

Dinner