Spins in a Quantum 1D Multi-particle Environment: from Exotic Phases and Non-trivial Topology to Protected Transport

(LMU, 02.09.2019 – 05.09.2019)

Venue: Theresienstr. 37 D-80333 München, ground floor/entrance hall (entrance from Theresienstr., the nearest to the coloured building of Brandhorst museum)

List of poster presentations

1. M. Bahovadinov (Bielefeld University, D)
   Local entanglement and String Order Parameter in dimerized models
2. F. Buccheri (Heinrich-Heine University in Düsseldorf, D)
   Chiral Y-junction of quantum spin chains
3. E. Kogan (Bar-Ilan University, IL)
   Poor man's scaling and Lie algebras
4. M. Lotem (Tel-Aviv University, IL)
   Nonequilibrium Steady State of Quantum Impurities - A New Tensor-Network Method
5. G. B. Martins (Universidade Federal de Uberlândia, BR)
   Kondo in 1d and quasi-1d spin-orbit-coupled environments: Rashba quantum-wire and Silicene zigzag nanoribbons
6. B. Pal (Ben-Gurion University, IL)
   Quasiperiodic magnetic chain as a spin filter for arbitrary spin states
7. G. Pasqualetti (LMU, D)
   Quantum simulations of multiorbital electron systems with ultracold ytterbium atoms
8. T. Patlatiuk (University of Basel, CH)
   Edge state spectroscopy in GaAs quantum wires
9. S. Piatrusha (Institute of Solid State Physics, RU)
   Topological protection brought to light by the time-reversal symmetry breaking
10. M. Pletyukhov (RWTH Aachen University, D)
    Characterization of topological properties of one-dimensional systems by universal properties of the boundary charge
11. D. Sabonis (University of Copenhagen, DK)
    Microwave induced single electron transitions between Majorana zero modes in hybrid superconducting-semiconducting islands
12. S. Sarkar (Ben Gurion University of the Negev, IL)
    Fermi surface instabilities in a helical Fermi liquid - Pomeranchuk and Lifshitz transitions
13. F. Stäbler (LMU, D)
    Transport properties of quasi-one-dimensional, dense Kondo chains

14. E. Walter (LMU, D)
    Uncovering non-Fermi-liquid behavior in Hund metals: critical behavior of a three-orbital Kondo model

15. Wei Wang (MPI-PKS, Dresden, D)
    Anyons and Fractional Quantum Hall effect in Fractal Dimensions

16. H. Weldeyesus (University of Basel, CH)
    Wave Function and Velocities of Quantum Hall edge states

17. R. Whelan (University of Birmingham, UK)
    Phase Driven Transport of Bosons & Links to Majorana Zero Modes