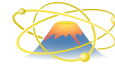


Annual Meeting 2022 - Schedule

TRR 306

QuCoLiMa



Quantum Cooperativity of Light and Matter

08.10.22

List of Posters		
#	Title	Presenter
1	Optically addressable defects in SiC	Yanis Abdedou
2	Linear optical elements based on cooperative subwavelength emitter arrays	Nico Bassler
3	Superradiance of non-interacting atoms	Manuel Bojer
4	Bosonic error correction for atomic ensemble based quantum repeaters	Subrahmanya Siddardha Chelluri
5	Cavity-induced long-range interactions in strongly correlated systems	Paul Fadler
6	Laser cooling and resonance fluorescence of trapped ion crystals	Marvin Gajewski
7	Ultradilute quantum liquid of dipolar atoms in a bilayer	Grecia Gujjarro
8	Photoacid constructs for photonics	Mara Heitmann
9	Coupling of color center in 4H-SiC to mechanical vibrations	André Hochreiter
10	Methods for increasing the yield of color center generation in diamond	Alejandro Jimenez
11	Mini project in the group of Prof. Dr. Thomas Basché	Hannah Jost
12	Linked cluster expansions of a perturbed topological phase	Viktor Kott
13	Quantum-critical properties of random transverse-field Ising models extracted by quantum Monte Carlo methods	Calvin Krämer
14	Collective phenomena in a system of two interacting qubits	Robin Rüdiger Krill
15	Dynamical mean-field theory for a ferroelectric material with photon-mediated interactions	Katharina Lenk
16	High-order series expansions for Lindbladians	Lea Lenke
17	Implementation of a sub 10ps RMS jitter TDC in Xilinx 7-series FPGAs	Verena Leopold
18	Coupling a defined number of molecules to a dielectric antenna	Siwei Luo
19	Spin induced polarisation in 2-D magnetic materials	Ipsika Mohanty
20	Linked cluster expansions via hypergraph decompositions	Matthias Mühlhauser
21	New generation of microfabricated segmented ion traps for QC	Jan Müller
22	Control software stack for shuttling-based trapped-ion quantum computing	Diego Alberto Olvera Millán
23	Application of an ion based quantum processor	Helin Ozel
24	Towards digital-analog simulations using superconducting qubits and resonators	Riccardo Roma
25	Quantum correlations between two qubits coupled to a phononic bath	Sayan Roy
26	Adaptive characterisation of superconducting quantum devices	Anurag Saha Roy
27	Towards multi-photon tests of hyper-complex quantum mechanics	Ece Ipek Saruhan
28	High-order series expansions for the Dicke model	Andreas Schellenberger
29	Towards measurement-based variational quantum simulation of the multi-flavor Schwinger model with a flavor-dependent chemical potential	Stephan Schuster
30	Photo correlations of calcium trapped-ion crystals	Zyad Shehata
31	Addressed cooling of same/mixed species of ion crystals	Robin Strohmaier / Daniel Wessel
32	Flat-optics photon pair generation in the pulsed regime	Vitaliy Sultanov
33	Quantum-classical hybrid algorithms for transverse-field Ising models	Sumeet Sumeet
34	Light induced correlations in cold Dysprosium atoms	Ishan Varma
35	Stability of a magnetically levitated nanomagnet in vacuum	Vanessa Wachter
36	Quantum algorithms for the poisson equation: approaches for today and future quantum computers	Lena Wagner
37	Interacting magnons and towards analyzing phase-transitions with continuous similarity transformation: easy-axis square-lattice XXZ model	Matthias Walther
38	Equilibrium propagation and quantum machine learning	Qingshan Wang
39	Digital quantum simulation of the Ising-Dicke-Model	Yannik Weber
40	Measuring the parity of an ion crystal with a single photon	Benjamin Zenz