Quantum Colloquium

Entanglement enabled probes of open quantum systems

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Host: Johannes Fink

Josephson junction-based quantum circuits have enabled broad exploration into open quantum systems in the microwave frequency domain. The combination of coherent quantum bits, robust single qubit control, entangling gates, and quantum noise-limited parametric amplifiers has yielded an unprecedented view into the physics of quantum measurement and dissipation. I will discuss our recent experimental work on topics that touch on fundamental questions in quantum physics and its applications to other areas of physics. Key topics include non-Markovian and non-Hermitian dynamics in dissipative qubit systems as well as novel applications of quantum entanglement to quantum sensing.

Tuesday, October 1, 2024 11:00am - 12:00pm
Office Bldg West / Ground floor / Heinzel Seminar Room (I21.EG.101)

This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station. Please find a schedule of the ISTA Shuttle on our webpage: https://ista.ac.at/en/campus/how-to-get-here/ The ISTA Shuttle bus is marked ISTA Shuttle (#142) and has the Institute Logo printed on the side.