

PHYSICS COLLOQUIUM

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CONTINUOUS MONITORING AND FEEDBACK CONTROL OF SUPERCONDUCTING QUBITS

The precision control offered by modern superconducting processors has enabled the implementation and use of time-continuous monitoring of quantum information using coupled microwave cavities. This talk reviews how these measurements are implemented and gives a tour of recent experimental and theoretical uses for the technique, including measurement-based gates using the quantum Zeno effect and state stabilization using feedback control.

Wednesday, March 26, 2025

SH Room 121 at 4:00