



**Functional Matter**  
Designer Materials and Quantum Technologies

Ein fakultätsübergreifendes Kooperationszentrum



## Invitation

# An Introduction to Superconducting Qubits

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Superconducting qubits are solid-state electrical circuits fabricated using techniques borrowed from conventional microchip devices. I will first demonstrate how to build such a qubit from common circuit elements and Josephson junctions, a non-dissipative and strongly non-linear element. I will discuss the different kinds of superconducting qubits and strategies to avoid decoherence. Finally, I will review the progress on the different systems.

**Freitag, 20. März 2009**  
**15:15 Uhr**

Seminarraum  
Atominstitut der Österreichischen Universitäten  
Stadionallee 2, 1020 Wien

J. Schmiedmayer