



# SFB 631

*Festkörperbasierte Quanteninformationsverarbeitung*



## *Seminar Announcement*

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- Location** Walther-Meissner-Institut  
Seminarraum 143
- Time** Tuesday, 21.12.2004  
17:00 Uhr st
- Speaker** Frank Deppe  
NTT Basic Research Laboratories, Atsugi, Japan
- Title** Readout of a Superconducting Flux Qubit via a Capacitor
- Abstract** We apply a novel variant of the pulsed readout of a superconducting flux qubit. In addition to the usual low pass filters we insert a capacitor into the leads of the readout SQUID to cut low frequency noise, which is considered to be a source of qubit dephasing. We observe a good discrimination of the qubit state. The results  $T_1=150$  ms and  $T_2=1$  ns from spectroscopy, no gap, no Rabi) are consistent with measurements with the usual method.

*gez. R. Gross*