



SFB/TRR 21 - Colloquium

20. December 2012, Ulm

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### Control of quantum sensors

The success of quantum-enhanced sensors relies on precise control of the experimental system. Unfortunately, simple application of known strategies to reduce decoherence does not necessarily translate into protection of phase measurements: the techniques – such dynamical decoupling – that eliminate decoherence also eliminate the very signal that one wishes to measure.

In this talk I will show how we can extend control techniques to achieve a better and more flexible compromise between sensitivity and noise protection and even new metrology tasks, such as spectroscopy.

**20. December 2012, 17:00 Uhr**

**Universität Ulm, Raum N24/H13  
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