



**CO.CO.MAT**

CONTROL OF QUANTUM CORRELATIONS IN TAILORED MATTER  
SFB/TR 21 – STUTTGART, ULM, TÜBINGEN

## Kolloquium

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(Universität Heidelberg)

### Future Challenge in Long-distance Quantum Communication

In this talk, I shall review the recent experimental progress in the field of quantum teleportation and quantum cryptography. The main difficulties in future large scale realization of quantum communication are photon loss and decoherence. To achieve long-distance quantum communication, I shall discuss in details how the combination of free-space quantum communication and quantum memory can provide a promising way out.

**Wann?** Donnerstag, 16.02.2006, 17:15 Uhr

**Wo?** Universität Stuttgart, Raum 2.136