



CO.CO.MAT

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

Seminar

David Speer

(Universität Bielefeld)

Absolutnegativer Widerstand in Josephson-Kontakten

Within the Stewart-McCumber-Model, the I-V-characteristics of a Josephson junction can be identified with the response behaviour of a particle to an externally applied force in a harmonic potential. Absolut negative particle mobility corresponds to absolut negative resistance(ANR) in the Josephson junction. Numerical simulations of the corresponding Langevin-equation will be presented showing ANR for various junction parameters. A specific example will be investigated more closely with focus on the noise dependence of the ANR-effect.

Wann? Montag, 13.03.2006, 10:00 Uhr

Wo? Universität Tübingen, Raum D6 P31