

Einladung zum Physikalischen Kolloquium

**Montag, 06.12.2010,
16.15 Uhr, H2 (025)**



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**Structure formation and quantum effects in
model colloids and nanostructures**

Model colloids in external potentials show interesting structural transformations and phase diagrams, which are analyzed by computer simulations and "finite size scaling" techniques. Effects of the potential range and quantum effects on the phase diagram are discussed. The effect of stretching of nano wires on the conductivity is studied as well as the effect of geometry on magnetic domain walls. The methods are discussed and a comparison with experimental results is given.

