

SFB 608

Einladung zum Kolloquium

Ort: Universität zu Köln
II. Physikalisches Institut, Seminarraum 201

Zeit: Mittwoch, den 04. Februar 2004, 15 Uhr c.t.

Sprecher: Prof. K. Ziegler
Institut für Physik
Universität Augsburg

Thema: Quantum phases in multi-component Bose gases.

An ultra-cold Bose gas in an optical lattice with strong repulsive interaction is considered. It is assumed that in the absence of tunneling the ground state has an N -fold degeneracy. We study the quantum phases at zero temperature for $N=1,2$ and in the asymptotic regime $N \gg 1$, including the transition from a Bose-Einstein condensate to a Mott insulator.

Gez. Prof. Th. Nattermann