



OTTO VON GUERICKE
UNIVERSITÄT
MAGDEBURG

NAT

FAKULTÄT FÜR
NATURWISSENSCHAFTEN

Physikalisches Kolloquium

Dienstag, **02. Juli 2019**, 16:30 h

Gebäude 16, Raum 215

Professor Dr. Siegfried Dietrich

(Max-Planck-Institut für Intelligente Systeme, Stuttgart)

“Critical Casimir Forces”

Abstract:

Long-ranged correlations in a fluid near its critical point lead to clearly identifiable effective forces acting on confining walls. The corresponding universal scaling functions are discussed for various boundary conditions and geometries. The theoretical predictions are compared with high precision experimental data for He^4 and He^3/He^4 wetting films near the superfluid phase transition as well as with synchrotron scattering data from classical binary liquid mixtures. Direct measurements and applications for colloidal suspensions are discussed.

Alle Interessierten sind herzlich eingeladen!

Magdeburg, den 20.06.2019

gez. Prof. Dr. Claus-Dieter Ohl