

EINLADUNG ZUM
WIENER PHYSIKALISCHEN KOLLOQUIUM

**NEW HORIZONS IN CONDENSED MATTER
PHYSICS BY SCANNING PROBE TECHNIQUES**

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Scanning probe methods (SPM) allow the investigation of local physical and chemical properties down to the atomic scale, in addition to providing fascinating real-space views of atomic and molecular structures in the presence of defects or disorder. This lecture will focus on recent advances in scanning tunnelling and atomic force microscopy and spectroscopy as well as on novel applications of these techniques in modern condensed matter physics, including atomic-scale studies of semiconductors, metals, magnetic and molecular materials. Most recent exciting developments based on advanced SPM instrumentation working at ultra-low temperatures and high magnetic fields will be presented, revealing quantum effects directly in real space at very low energy scales.

Montag, 27. Oktober 2008, 17:30 Uhr
(ab 17:00 Uhr Kaffee)

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