

FRI1M: Surface, Interface and Low-Dimensional Physics - Electronic Properties and Surface Structure

Chaired by S. Fabris, CNR-INFM Democritos and Scuola Internazionale Superiore di Studi Avanzati, Trieste, Italy

Time: Friday 8:40–10:00

Location: Aula Magna

Invited talk FRI1M.1 8:40 Aula Magna
Dynamic Processes Observed by Scanning Tunneling Microscopes: Conformation Changes, Diffusion and Vibrations — ●WERNER A. HOFER — The University of Liverpool, Surface Science Research Centre, Liverpool, United Kingdom

We show that the field-induced diffusion of adsorbates to the probe tip can change the magnetic resolution in the experiments by nearly one order of magnitude, and that the tip field will change the Kondo temperature of a single magnetic impurity in a continuous manner during its approach.

FRI1M.2 9:20 Aula Magna
Controlling an atomic scale machine by Scanning Tunneling Microscope — ●AMIRMEHDI SAEDI, ARIE VAN HOUSELT, BENE POELSEMA, and HAROLD ZANDVLIET — Solid State Physics Group and MESA+ Institute for Nanotechnology, University of Twente, P.O. Box 217, 7500 AE

Enschede, The Netherlands

A new atomic configuration has been found on a Pt modified Ge(001) surface by STM which acts similar to a pinball machine consisting of a pair of dimers functioning as its flippers.

FRI1M.3 9:40 Aula Magna
What Can we Learn from Antimatter at the Surface? — ●CHRISTOPH HUGENSCHMIDT, JAKOB MAYER, PHILIP PIKART, MARTIN STADLBAUER, and KLAUS SCHRECKENBACH — Physics Department E 21 and FRMII, Technical University Munich, 85747 Garching, Germany

Matter-antimatter annihilation of positrons trapped at surfaces or interfaces lead to a completely different access to elemental selective information. Experiments on layered Al/Sn-samples and on metallic surfaces were performed using a high-intensity positron beam.