Universität Regensburg

FAKULTÄT FÜR PHYSIK
Graduiertenkolleg
Elektronische Eigenschaften von
Nanostrukturen auf Kohlenstoffbasis

Einladung

zum

Seminarvortrag

Teil II

Freitag, 06.07.2018, 14:30 Uhr

Seminarraum PHY 5.0.21

Shadi Fatayer

IBM Research – Zurich, Rueschlikon, Switzerland

"Charging individual molecules on multilayer insulating films studied by atomic force microscopy"

Abstract:

Here, we present results concerning molecules and their charge-state determination and control on multilayer NaCl films. We demonstrate lateral single electron transfer between molecules (1) and gain insight into charging processes via single-electron tunneling spectroscopy, where we quantify the reorganization energy of a molecule on a NaCl substrate (7). Finally, we show results where the charge state of a complex on top of an insulator plays a key role in its on-surface chemical reaction.

References

(1) W. Steurer et al. Nature Communications 114, 036801 (2015)
(2) S. Fatayer et al. Nature Nanotechnology 13, 376 (2018)

Gastgeber: Prof. Dr. Jascha Repp