



school for  
contacts in nanosystems

# Autumn Workshop

November 26<sup>th</sup> / 28<sup>th</sup> 2010

Hameln



**NTH School for Contacts in Nanosystem**

[www.nth-nano.de](http://www.nth-nano.de)

**Workshop Organisation**

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# Friday 26<sup>th</sup>

Internet access via wireless lan in the conference room.

Time	Speaker	Title
14:00	Jens Hübner (NTH School for Contacts in Nanosystems)	P3: Spin and Charge Dynamics at Surfaces and Interfaces in Wide Gap Semiconductor Nanostructures
15:00	Hagai Cohen (Weizmann Institute of Science Rehovot)	The NON-contact CREM probe: Applications to nano scale systems and analogy to standard contacts
16:00	Michael Huth (Goethe Universität Frankfurt)	Nano-granular metals: from electronic correlations to sensor applications
17:00	Elke Scheer (Universität Konstanz)	Towards Molecular Electronics: Electronic Transport through Molecules under High Bias and Electromagnetic Irradiation
18:00	Uwe Bovensiepen (Universität Duisburg-Essen)	Ultrafast dynamics at interfaces investigated in the time domain
19:00	Christoph Lienau (Carl von Ossietzky Universität Oldenburg)	Ultrafast electron transfer dynamics in organic and artificial solar cell materials
20:00	<b>Dinner</b>	
21:00	<b>Poster Session</b>	

# Saturday 27<sup>th</sup>

Breakfast from 7:30

Internet access via wireless lan in the conference room.

Time	Speaker	Title
9:00	Eric Jeckelmann (NTH School for Contacts in Nanosystems)	P2: Quantum impurities in contact to a complex environment
10:00	Ralf Bulla (Universität zu Köln)	Real-Space Kondo Correlations: the Local-Moment Cloud
11:00	Jan Martinek (Polish Academy of Sciences Poznan)	Molecular spintronics: Kondo effect, exchange interaction, and spin precession in single molecules attached to ferromagnetic electrodes
12:00	<b>Lunch</b>	
13:00	Hubertus Marbach (Friedrich-Alexander-Universität Erlangen-Nürnberg)	How to exploit substrate molecule interactions for the assembly and functionalization of porphyrin derivatives
14:00	Vladimir Falko (Lancaster University)	Charge transfer between SiC and graphene in epitaxial graphene
15:00	Christian Jooß (Georg-August-Universität Göttingen)	Structure and electric transport properties of correlated oxide and oxide-metal interfaces
16:00	Winfried Daum (NTH School for Contacts in Nanosystems)	P1: Energy Conversion Processes in Molecular Systems at Nano Contacts
18:00	<b>Dinner</b>	
19:30	<b>Excursion</b>	

# Sunday 28<sup>th</sup>

Breakfast from 7:30, Check-Out until 11:00, baggage can be stored in conference room.

Time	Speaker	Title
9:00	Daniel Schaadt (DFG-Centrum für Funktionelle Nanostrukturen Karlsruhe)	Plasmon enhanced absorption for photovoltaic applications
10:00	Bernd Kästner (PTB Braunschweig)	Single-electron pumping
11:00	Rolf Haug (NTH School for Contacts in Nanosystems)	P4: Interaction Effects in Contacting Semiconducting Nanostructures
12:00	<b>Lunch</b> (optional)	

## Train Connection from Hameln

Time	Destination	Platform	Train
11:20	Hannover	3	S5
11:28	Braunschweig, Goslar, and Hannover	5	eurobahn (need to change train in Hildesheim)
12:20	Hannover	3	S5
12:28	Braunschweig, Goslar, and Hannover	5	eurobahn (need to change train in Hildesheim)
13:20	Hannover	3	S5
13:28	Braunschweig, Goslar, and Hannover	5	eurobahn (need to change train in Hildesheim)
14:20	Hannover	3	S5
14:28	Braunschweig, Goslar, and Hannover	5	eurobahn (need to change train in Hildesheim)

# Posters

<b>Klaus Stallberg</b>	P1	"Adsorption of porphyrine molecules on iodine-modified Pt(100) electrodes: In situ STM study"
<b>Fatih Kalkan</b>	P1	"A STM with a scan width from 500 $\mu\text{m}$ down to sub nanometers"
<b>Grazyna Antczak</b>	P1	"Diffusion and Early Growth of Cu-Phthalocyanine on Ag(100)"
<b>Ulrich Krieg</b>	P1	"Uniaxial plasmons in Ag-nanowires grown on Si (557)"
<b>Jan Metje</b>	P1	"Second-Harmonic Generation from Soret-Band Excitations in Porphyrin (MgTPP) films"
<b>Benjamin Borkenhagen</b>	P1	"Anti-Phase Disorder in III-V Epitaxy on Si(100): A Low-Energy Electron Microscopy Study"
<b>Malcolm Einhellinger</b>	P2	"Transport simulations in correlated one-dimensional systems"
<b>Jan Grelik</b>	P2	"Persistent Currents in the Open Heisenberg Chain"
<b>Björn Willenberg</b>	P2	"Spin-Dimers in Contact with Quantum Antiferromagnet"
<b>Brendan E. Coughlan</b>	P2	"Coherence and correlation effects in transport through nonosystems"
<b>Alexander Wagner</b>	P3	"ZnO nanostructures for renewable energy sources: DSSC"
<b>Hauke Horn</b>	P3	"Time resolved photoluminescence spectroscopy of ZnO/Zn <sub>1-x</sub> Mg <sub>x</sub> O MQWs on nanorods"
<b>Andreas Kraus</b>	P3	"Growth and characterization of InGaN and InN by RF-MBE"
<b>Vedran Bandalo</b>	P3	"Manufacturing of the nanopore cavity devices"
<b>Hongdan Yan</b>	P3	"Nanoscale porous alumina templates: properties and spectroscopic investigations"
<b>Henrik Schmidt</b>	P4	"Electronic Properties of Decoupled Graphene Monolayers"
<b>Daniel Tutuc</b>	P4	"The Two-impurity-Kondo Problem"
<b>Majdi Salman</b>	P4	"Terahertz Photoresponse Dependence on Magnetic and Electric Fields in Graphene"

