

Workshop of
**School for Contacts in Nanosystems:
Interaction, Control, and Quantum Dynamics**

TU Braunschweig, 30. 3. 2017
Physikzentrum Hörsaal 3.1, Mendelssohnstr. 3, Braunschweig

9:30 - 10:00 Coffee

10:00 - 10:45 **Benno Willke (LUH) - Tutorial -**
Gravitational wave detection

10:50 – 11:35 **Patrick Recher (TUBS) - Tutorial**
Topological Insulators

11:40 – 12:05 **Hans Werner Schumacher (PTB)**
Single electron pumps

12:10 – 12:30 **Timo Wagner (LUH)**
Feedback in single electronics

12:30 - 13:10 Lunch

13:10 – 14:30 Posters and Coffee

14:30 – 14:55 **Feng Yu (TUBS)**
Towards vertical GaN power electronics – Nanowire arrays for vertical field effect transistors

15:00 – 15:25 **Uwe Rossow (TUBS)**
Surface processes during growth of indium containing group III nitride layers

15:30 – 16:15 **Jörg Schilling (Halle) - Tutorial**
Metamaterials and photonic crystals

16:20 – 16:40 **Klaus Stallberg (TUC)**
Localized surface plasmons of individual silver clusters and their interaction with porphyrin films

16:45 – 17:05 **Timo Lichtenstein (LUH)**
Testing quasi-1d bandstructures by plasmon spectroscopy

17:10 Closing

Posters:

Charge Shuttling in Quantum Dot Arrays, **Johannes Bayer (LUH)**

The effective potential energy drop as a control parameter for the sheet carrier density of two-dimensional electron gases in AlGa_N/Ga_N heterostructures, **Dennis Mauch (TUBS)**

Anyons from N_f-flavor fermions, **Daniel Borcharding (LUH)**

Fano resonances in Transport through Majorana networks, **Daniel Schuray (TUBS)**

Tuning of 1D Plasmon properties on Au-Si(hhk) by adsorbates, **Zamin Mamiyev (LUH)**

Large-area quasi-free-standing monolayer graphene on SiC, **Davood Momeni (PTB)**

Fabrication and Characterization of Microoptical Elements, **Daria D. Bezshlyakh (TUBS)**

Formation of stable surface oxides at n-GaP(100) photoanodes with increased durability for photoelectrochemical application, **Waqas Saddique (TUC)**

DMRG Method for the DC-Conductance in a one-dimensional Quantum Wire, **Jan Bischoff (LUH)**

Field Control of Magnonic Heat Flow, **Benjamin Köhler (TUBS)**