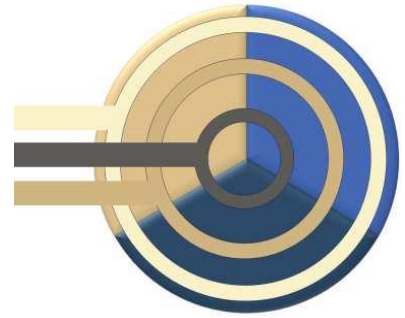


**Graduiertenkolleg 1782**  
**“Functionalization of Semiconductors”**  
**Tagungshaus Schloss Herborn**



**Program 22. – 24.09.2021**

**Wednesday, 22.09.2021**

until 12:00      Arrival

12:15 – 12:55      Lunch

**Session I**

13:30 – 14:00      **Marcel Kröner:** Investigation of Ga(P,Sb) towards a possible direct Band Gap

14:00 – 14:30      **Thilo Hepp:** Bismuth containing W-type laser structures for long wavelength emission on GaAs

14:30 – 15:00      Coffee Break (Dining Hall)

**Session II**

15:00 – 15:30      **Johannes Glowatzki:** MOVPE Growth of SiGe at Low Growth Temperatures and p-doping via Ga Incorporation

15:30 – 16:00      **Robin Günkel:** In-situ analysis of Ga(As,Bi) interfaces during low temperature growth by MOVPE

16:00 – 16:30      **Christian Ritter:** Interpnictogen MOVPE Precursors

16:30 – 18:00      Move into the rooms, possibility for scientific exchange in small groups

18:15 – 18:50      Dinner

## Thursday, 23.09.2021

07:15 – 07:50 Breakfast

### Session III

09:00 – 09:30 **Tobias Dunaj (Posterpräsentation):** Synthesis of Binary Interpnictogen Compounds from Diaryl and Dimethyl Halido Bismuthanes

09:30 – 10:00 **Luise Rost:** The influence of excitation power and temperature on the luminescence properties and offset of Ga(As,Sb) and (Ga,In)As-based type II heterostructures

10:00 – 10:30 Coffee Break

### Session IV

10:30 – 11:00 **Maximilian Widemann:** In-situ TEM Investigations of III/V Semiconductor Materials

11:00 – 11:30 **Mikko Wilhelm:** Optoelectronic Coupling between Colloidal Quantum Dots and Semiconductor Substrates

11:30 – 12:00 **Florian Kreuter:** Surface functionalization with nonalternant aromatic compounds: a computational study of azulene and naphthalene on Si(001)

12:15 – 12:55 Lunch

13:30 – 17:30 **Discussions**

Networking - Joint nature hike around Herborn: Kleiner Wäller "Hessentagswanderweg"

18:15 – 18:50 Dinner

## Friday, 24.09.2021

07:15 – 07:50 Breakfast

08:00 – 09:00 Tidy up and leave rooms

### Session V

09:00 – 09:30 **Badal Mondal:** Strain induced direct-indirect transition in ternary III-V semiconductor from ab-initio approach

09:30 – 10:00 **Oliver Maßmeyer:** MOVPE growth of Ga(N,As) interlayers with high N contents on GaAs (001) surfaces

10:00 – 10:30 Coffee Break

### Session VI

10:30 – 11:00 **Saleh Firoozabadi:** Quantification of light elements at a low angular regime; a combination of EFSTEM and 4DSTEM

11:00 – 11:30 **Sven Christian Liebscher:** High-Harmonic Generation in Tellurium

12:15 – 12:55 Lunch

afterwards Departure