

SFB 1083 Workshop – Type-II-Heterostructures

Thursday, May 17 2018, 14:00 h
Kl. Hörsaal, Renthof 5, FB Physik

Session I (Chair: Prof. Dr. Stephan Koch)

- 14:00 - 14:20 **Dr. Tineke Warncke (B4 – Marburg)**
Interlayer excitons in transition-metal dichalcogenide heterostructures with type-II-band alignment
- 14:20 - 14:40 **Dr. Christian Fuchs (A1/B7 – Marburg)**
MOVPE growth of type-II-heterostructures and characteristics of type-II-“W”-heterostructure lasers
- 14:40 - 15:00 **Pirmin Kükelhan (A5 – Marburg)**
Segregation at interfaces in W-type-QWH explored by atomic resolution STEM

15:00 - 15:30 Coffee Break

Session II (Chair: Prof. Dr. Kerstin Volz)

- 15:30 - 15:50 **Markus Stein (B3 – Marburg)**
On the influence of the interface on charge carrier transfer and recombination in type-II-semiconductor heterostructures
- 15:50 - 16:10 **Dr. Sebastian Gies (B3 – Marburg)**
Optical spectroscopy of type-II-heterostructures with interface modifications
- 16:10 - 16:30 **Dr. Jan Oliver Oelerich (B4/B7 – Marburg)**
Ab-initio calculations of semiconductor valence band offsets

16:30 -17:15 Coffee Break

Session III (Chair: Prof. Dr. Wolfgang Stolz)

- 17:15-18:00 **Prof. Dr. Joachim Wagner (Fraunhofer-Inst. f. Angew. Festkörperphysik, Freiburg)**
Quantum Cascade Lasers for Spectroscopy – Concepts and Use Cases