

# Program

**Tuesday, January 7, 2014**

17:00 – 21:00 Registration

from 18:00 *BUFFET DINNER* / Informal get together

**Wednesday, January 8, 2014**

07:45 *BREAKFAST*

## **Welcome**

08:45 – 09:00 Timo Kuschel **Welcome and opening**  
Tamara Nunner  
Andy Thomas

## **Topological Insulators**

09:00 – 09:45 Stefan Blügel **Insight into topological insulators from first-principles**

09:45 – 10:30 Claudia Felser **New Heusler compounds for spin transfer torque and spincalorics**

10:30 – 11:00 *COFFEE BREAK*

11:00 – 11:45 Ewelina Hankiewicz **Spin helical transport in normal and superconducting topological insulators**

11:45 – 12:30 Laurens Molenkamp **HgTe as a topological insulator**

12:30 – 12:40 **Conference Photo** (in front of the Physikzentrum)

12:40 *LUNCH*

# Program

**Wednesday, January 8, 2014**

## **Spin Polarized Tunneling**

- 14:30 – 15:15 Günter Reiss      **Spin transfer torque in magnetic tunnel junctions**
- 15:15 – 16:00 Tomas Jungwirth      **Antiferromagnetic spintronics**
- 16:00 – 16:30 *COFFEE BREAK*
- 16:30 – 17:20 **Shotgun presentations**
- 17:20 – 18:00 **Poster sessions**
- 18:00            *DINNER*
- from 20:00      **Poster session and get together**

# Program

**Thursday, January 9, 2014**

08:00 *BREAKFAST*

## **Spin Torque**

- 09:00 – 09:45 Christian Heiliger **Thermal spin-transfer torque**
- 09:45 – 10:30 Sebastian Goennenwein **Spin current transport across interfaces**
- 10:30 – 11:00 *COFFEE BREAK*
- 11:00 – 11:45 Jairo Sinova **Anti-damping intrinsic spin-orbit torque arising from Berry phase**
- 11:45 – 12:05 Sergej Demokritov **Synchronization of spin-Hall nano-oscillators: Role of non-thermal noise**
- 12:05 – 12:25 Johannes Leutenantsmeyer **Switching current densities on the kA/cm<sup>2</sup> scale in perpendicular magnetic tunneljunctions**

12:30 *LUNCH*

## **Magnetic Domains**

- 14:30 – 15:15 Stuart Parkin **Chiral spin torque at magnetic domain walls**
- 15:15 – 16:00 Rembert Duine **Magnon Bose-Einstein condensation via spin-current injection**
- 16:00 – 16:30 *BREAK*
- 16:30 – 16:50 Gisela Schütz **High-speed vortex core reversal: A magnetic X-ray microscopy study**
- 16:50 – 17:10 Vitaliy Vasyuchka **Magnon transport in a temperature gradient**
- 17:10 – 17:30 Frank Schlickeiser **Dynamics of domain walls and domains in thermal gradients**
- 17:30 – 17:50 Gerhard Jakob **Manipulating thermal transport in CMR materials**

18:00 *HERAEUS DINNER*  
*(cold & warm buffet, free beverages)*

from 20:00 **Poster Session** and get together

# Program

**Friday, January 10, 2013**

08:00 *BREAKFAST*

## **Spin Caloritronics**

09:00 – 09:45 Christian Back **Transverse magneto-thermo electric effects in NiFe films**

09:45 – 10:30 Mathias Kläui **Spin transport due to thermal, optical and electrical excitations**

10:30 – 11:00 *COFFEE BREAK*

11:00 – 11:45 Kornelius Nielsch **Spin-caloric transport in magnetoresistive nanostructures**

11:45 – 12:30 Bart J. van Wees **Spin caloritronics in metal and insulator ferromagnetic systems**

12:30 Timo Kuschel  
Tamara Nunner  
Andy Thomas **Awards, Closing + Goodbye**

13:00 *LUNCH*

**End of the seminar and departure**