

**Agenda**

Place: Berghotel Bastei, 01847 Lohmen  
updated: 21.09.2016 (PZ)

**Sunday, 25 September 2016**

| Start         | Who          | Durat. | Short Title (Full titles see next page)                                            | Notes             |
|---------------|--------------|--------|------------------------------------------------------------------------------------|-------------------|
| 10:30 / 09:45 |              |        | Transfer from <b>Pirna</b> / Hiking from <b>Rathen</b>                             |                   |
| 12:00         |              |        | Arrival/Lunch Buffet                                                               |                   |
| <b>13:30</b>  | S. Gemming   |        | <b>Welcome address</b>                                                             | Chair: C. Ronning |
| 13:40         | M. Kats      | 40+10  | Tunable mid-infrared photonics with phase-transition materials                     |                   |
| 14:30         | S. Slesazeck | 30+10  | The negative aspects at the origin of hysteresis effects in FeFETs and Nb switches |                   |
| 15:15         |              | 30     | Break                                                                              |                   |
| 15:45         | R. Waser     | 40+10  | Redox-based memristive switching in metal oxides                                   | Chair: H. Stöcker |
| 16:40         | H. Schmidt   | 30+10  | Analog resistive oxide switches for neuromorphic computing and fuzzy logics        |                   |
| 17:30         |              |        | Individual discussions, e.g. follow-up projects                                    |                   |
| 19:00         |              |        | Dinner                                                                             |                   |

**Monday, 26 September 2016**

|             |                  |       |                                                                                        |                   |
|-------------|------------------|-------|----------------------------------------------------------------------------------------|-------------------|
| 6:30        |                  |       | Sunrise Walk (Ferdinandstein, 10 min., sunrise at 6:56) individual                     |                   |
| <b>8:45</b> | M. DiVentra      | 40+10 | Memcomputing: a brain-inspired topological computing paradigm                          | Chair: H. Schmidt |
| 9:35        | T. You           | 30+10 | Non-volatile resistive switching in BiFeO <sub>3</sub> -based thin films + application |                   |
| 10:15       |                  | 30    | Break                                                                                  |                   |
| 10:45       | Y.-H. Chu        | 40+10 | Controllable Conduction at Complex Oxide Interfaces                                    | Chair: S. Gemming |
| 11:35       | S. Slesazeck (2) | 30+10 | The diversity of Nb <sub>2</sub> O <sub>5</sub> -based Memristors                      |                   |
| 12:30       |                  |       | Lunch                                                                                  |                   |
| 14:00       |                  | 60    | <b>Poster session and Coffee</b>                                                       | 11 Posters        |
| 15:00       |                  |       | Break                                                                                  |                   |
| 15:30       | A. McLeod        | 40+10 | Insulator-metal phase coexistence probed by cryogenic near-field microscopy            |                   |
| 16:20       | J. Rensberg      | 30+10 | In-situ electrical characterization of ion beam irradiated VO <sub>2</sub> structures  |                   |
| 17:15       |                  |       | <b>Sunset Walk</b> (Bastei Bridge/ Neurathen castle, sunset at 18:53) indiv.           |                   |
| 19:30       |                  |       | Dinner                                                                                 |                   |

**Tuesday, 27 September 2016**

|             |              |       |                                                                                        |                   |
|-------------|--------------|-------|----------------------------------------------------------------------------------------|-------------------|
| 8:30        |              |       | <b>Check-Out</b> (latest 10:30)                                                        |                   |
| <b>8:45</b> | B. Abendroth | 30+10 | Electronic transport properties of ALD thin films TiO <sub>2</sub> -SrTiO <sub>3</sub> | Chair: H. Stöcker |
| 9:25        | S. Krüger    | 20+10 | Technology Transfer, Validation and Exploitation                                       |                   |
| 10:00       |              |       | Break                                                                                  | Chair: P. Zahn    |
| 10:30       | M. Wuttig    | 40+10 | Novel Phase Change Materials by Design: The Mystery of Resonance Bonding               |                   |
| 11:25       | S. Gemming   | 30+10 | MEMRIOX: 5 <sup>th</sup> anniversary                                                   |                   |
| 12:05       | S. Gemming   | 20    | Final Discussion & Closing Remarks                                                     |                   |
| 12:30       |              |       | Lunch                                                                                  |                   |
| 14:00       |              |       | Departure                                                                              |                   |

Breakfast will be served from 7:00.