

# „Physics and Metrology at Very Low Temperatures“

December 10, 2009

Lecture Hall Hermann-von-Helmholtz-Building,  
PTB, Abbestraße 2-12, 10587 Berlin

## **Program:**

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| 12:00 – 13:00 | <b>Arrival, registration and snacks</b>  |
| 13:00 – 13:15 | <b>Welcome</b>   |
| 13:15 – 13:45 | Mikko Paalanen, Helsinki University of Technology<br><b>European Microkelvin Collaboration</b>   |
| 13:45 - 14:15 | Rudolf Gross, Walther-Meissner-Institut, München<br><b>Probing the bounds of possibility: ultra-low temperature experiments at the quantum limit</b>                                       |
| 14:15 – 14:45 | Dieter Kölle, Tübingen University<br><b>Ultracold atoms near superconductors</b>   |
| 14:45 – 15:15 | <b>Coffee break</b>  |
| 15:15 - 15:45 | Christian Enss, Heidelberg University<br><b>New frontiers at ultralow temperatures - microcalorimetry und noise thermometry</b>  |
| 15:45 – 16:15 | John Saunders, Royal Holloway, University of London<br><b>Quantum nanofluidics: study of superfluid <math>^3\text{He}</math> in submicron nanofabricated slab geometries by SQUID NMR</b>  |
| 16:15 – 16:35 | Alan Tennant, Helmholtz-Zentrum Berlin<br><b>Dirac strings and magnetic monopoles in spin-ice <math>\text{Dy}_2\text{Ti}_2\text{O}_7</math></b>  |
| 16:35 – 16:55 | Thomas Herrmannsdörfer, Dresden High Magnetic Field Laboratory<br><b>Superconductivity in Germanium</b>  |
| 16:55 – 17:15 | Eddy Collin, Institut Néel Grenoble<br><b>Measuring ultra-low temperatures with microfabricated silicon vibrating wire resonators: present developments within the Microkelvin project</b> |
| 17:15 – 17:35 | Jost Engert, PTB Berlin<br><b>Low-temperature thermometry: PLTS-2000 and primary thermometers</b>  |
| 17:35 - 19:00 | <b>Panel discussion</b>  |
| 19:00 - 22:00 | <b>Get-together with dinner on the gallery</b>   |