

Name .....

Title / function .....

Affiliation .....

Department .....

P.O. box / street .....

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City .....

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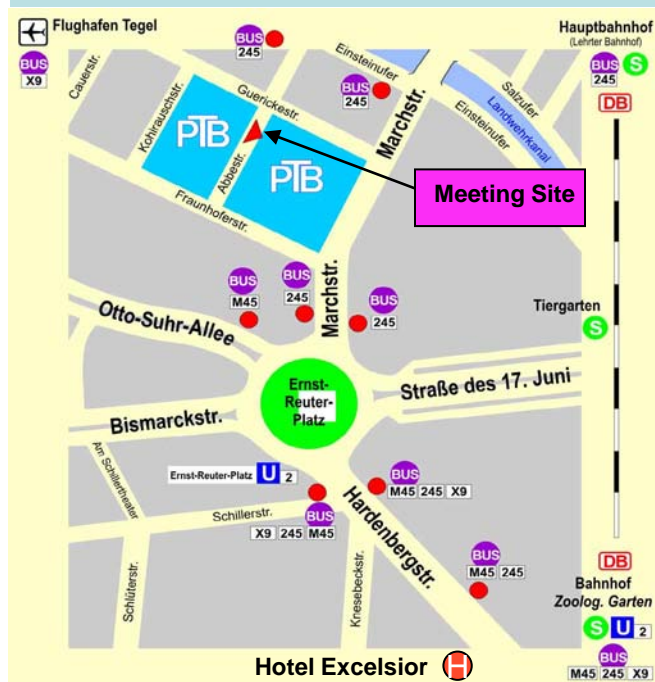
Phone .....

E-mail .....

- I am interested in the workshop, please keep me on your mailing list
- I would like to register
- I would like to give a talk
- I would like to present a poster

Please send by e-mail to  
 margit.kleinsorge@ptb.de  
 or fax to +49 (0)30 3481 7684

Access



By train: Berlin Main Station (Hauptbahnhof), take S-Bahn railway S5, S7 or S75 to Zoologischer Garten station. From there it is a 20-min. walk to PTB campus. Subway U2 (destination Ruhleben), buses 145 and 245, and express bus X9 connect to Ernst-Reuter-Platz.

By plane: Berlin-Tegel airport is connected to Ernst-Reuter-Platz and the train station Berlin Zoologischer Garten by express bus X9. The airport Berlin-Schönefeld is connected to the train station Berlin Zoologischer Garten by railway (Regionalexpress) and by the S-Bahn S9.

By car: The PTB campus is located in Berlin's "City West", close to the train station Berlin Zoologischer Garten and the Technical University.

# Physics and Metrology at Low Temperature

13-14 December 2012  
 Berlin

Physikalisch-Technische Bundesanstalt  
[www.ptb.de/berlin](http://www.ptb.de/berlin)

welcome to the  
 European Microkelvin Collaboration



## Invitation

13 -14 December 2012

Physikalisch-Technische Bundesanstalt  
Campus Berlin

## Physics and Metrology at Low Temperature

### The Workshop

25 years ago, the Berlin low-temperature groups at the Physikalisch-Technische Bundesanstalt (PTB), the Hahn-Meitner Institute and the Freie Universität initiated the *Berlin Low-Temperature Colloquium* to strengthen their collaboration and to discuss new developments and trends in low-temperature physics and cryogenic techniques. Several workshops have been held in the framework of this colloquium bringing together experts from academic institutes, universities and industrial companies active in the fields of low-temperature physics and metrology.

Following the low-temperature physics and metrology symposia held by PTB and the Helmholtz Zentrum Berlin HZB (founded by merging the former Hahn-Meitner Institute and BESSY) in May 2007 and December 2009, this workshop is dedicated to this anniversary.

Meanwhile, the *European Microkelvin Collaboration*, a project funded by the European Commission which was introduced in the 2009 workshop by its coordinator Mikko Paalanen, is in its final stages and the workshop will give an opportunity to review and disseminate results obtained so far and to discuss the activities towards creating an integrated European virtual laboratory in microkelvin physics and technology.

This workshop is intended to initiate discussions and networking activities within the European low-temperature community and to identify future demands on low-temperature metrology.

## Programme

### Scope

- Cooling techniques
- Thermometry
- Sensors
- Quantum gases, fluids and solids
- Magnetism and properties of solids
- Quantum electron transport
- Superconductivity

### Presentations

Presentations will be given as talks and posters. If you would like to give a presentation at the workshop, please submit a brief summary to [margit.kleinsorge@ptb.de](mailto:margit.kleinsorge@ptb.de).  
Deadline for contributions: 23 November 2012.

### Exhibition

In conjunction with the workshop we invite companies concerned with the field of low-temperature technology to exhibit their product portfolio. Please contact the workshop office for more information.

### Tentative Schedule

- Workshop starts on Thursday at noon
- Social gathering on Thursday evening
- Presentations continue on Friday
- For those interested in a lab tour and further discussions, PTB colleagues are available on Friday

### The Venue

The workshop is organized by the Physikalisch-Technische Bundesanstalt (PTB), Germany's National Metrology Institute, and the Helmholtz Zentrum Berlin. It takes place at the historical PTB campus which is located within walking distance of the Kurfürstendamm, a well-known shopping street in central Berlin, and the station Zoologischer Garten, right in the heart of Berlin's "City West".

## Organization

PTB Department 7.2 "Cryophysics and Spectrometry"  
Helmholtz-Zentrum Berlin BENSCH

Thomas Schurig	PTB	Klaus Kiefer	HZB
Peter Strehlow	PTB	Michael Meißner	HZB
Wolfgang Buck	PTB		

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E-mail: [margit.kleinsorge@ptb.de](mailto:margit.kleinsorge@ptb.de)

## Accommodation

We have provisionally reserved a number of rooms in the Excelsior Hotel which is within walking distance of PTB.

Room rates:	
Single room	79.00 Euro incl. breakfast
Double room	88.00 Euro incl. breakfast

Please make your reservation with the key word  
"PTB Abrufkontingent"

Reservation deadline is 29 October . After that date the availability of rooms is not guaranteed.

Tel.: +49 (0)30 31550  
Fax: +49 (0)30 97808450  
E-mail: [reservation.berlin@grandcityhotels.com](mailto:reservation.berlin@grandcityhotels.com)

## Registration

Please register by e-mail or fax using the form attached. Registration deadline: 30 November, 2012. The number of participants is limited, therefore early registration is advised.

The workshop is financially supported by the European Commission within the FP7 Network "Microkelvin Collaboration".