

8th Helmholtz-Symposium

In memory of its first president PTB organizes biannually the Hermann-von-Helmholtz-Symposium with the aim to introduce an up-to-date topic of basic research with particular relation to metrology.

On this occasion the interchange of contacts and ideas between PTB and other research institutes shall be vitalized.

On this years topic

The Helmholtz-Symposium 2005 will emphasize the potential and importance of mathematics for modern metrology. It is intimately linked to the creation of the new PTB department 8.4 "Mathematical Modelling and Data Analysis" in 2004. The Helmholtz-Symposium takes place on the same day as the inauguration of the new Konrad-Zuse-Building (see photo), that will be the joint home to department 8.4 as well as the information technology group IB.TI of PTB Berlin.

Leading experts in the fields of mathematical modelling, data analysis and computer science will present reviews and newest research results. The understanding of complex measurement processes often requires advanced numerical modelling methods or sophisticated data analysis. The main goal of this symposium is to introduce these tools to a wider audience of scientists in- and outside of PTB. Main themes are partial differential equations and methods of data analysis as well as their applications in material science, technology and medicine, and grid computing.



Program 9:45 to 16:00

Opening
ERNST O. GÖBEL
President of Physikalisch-Technische Bundesanstalt

Session 1: Technological Applications

The DFG Research Center MATHEON in Berlin –
Structure, Mission, Selected Projects
PETER DEUFLHARD
Konrad-Zuse-Zentrum für Informationstechnik &
Freie Universität Berlin

Modelling the Formation and Growth of Polycrystals
JAMES A. WARREN
Center for Theoretical and Computational Material
Science at NIST, Gaithersburg (USA)

Indirect Measurements and Inverse Data Analysis for
Monitoring Technical Systems
PETER MAASS
Fachbereich Mathematik, Universität Bremen

Session 2: Medicine, Complex Systems and Information Technology

Computational Physiology and the IUPS Physiome
Project
PETER HUNTER
Bioengineering Institute, University of Auckland,
New Zealand

Synchronization Analysis in Complex Systems and its
Applications
JÜRGEN KURTHS
Institut für Physik, Universität Potsdam

Data Grids: Challenges in World-Wide Data Manage-
ment
ALEXANDER REINEFELD
Konrad-Zuse-Zentrum für Informationstechnik &
Humboldt Universität Berlin

16:15: Inauguration Ceremony
Konrad-Zuse-Bau of PTB Berlin

Reply

Please send this reply note until May 31st, 2005 to

- opposite address or
- fax: +49 30 3481 509 or
- e-mail: maria.erhard-elsner@ptb.de

- I intend to participate in the Hermann-von-Helmholtz-Symposium on June 14th, 2005 in Berlin
- I intend to participate in the inauguration ceremony of the Konrad-Zuse-Building

Name, surname, title:

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Affiliation/address:

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8th Hermann-von-Helmholtz-Symposium
Berlin, June 14th, 2005

Physikalisch-Technische Bundesanstalt
Dr. Markus Bär
Department 8.4 "Mathematical
Modelling and Data Analysis"
Abbestraße 2–12
D-10587 Berlin

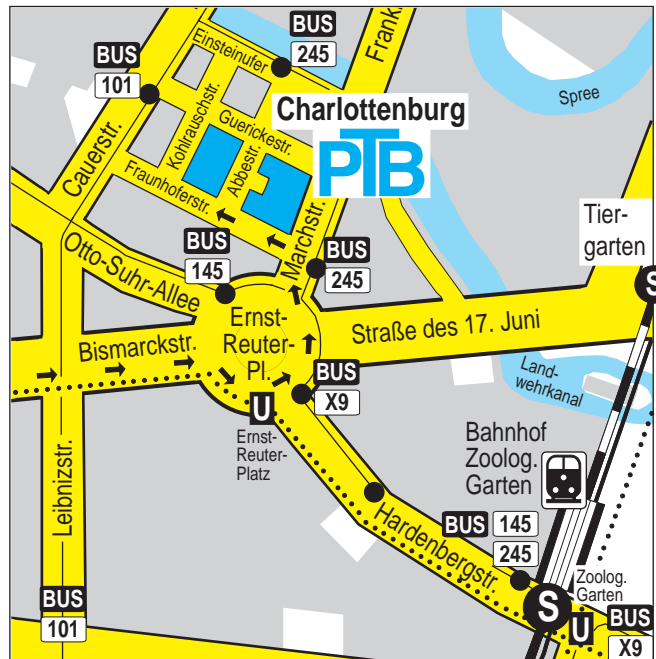
Venue

Physikalisch-Technische Bundesanstalt
Hermann-von-Helmholtz-Bau, Lecture Hall
Fraunhoferstraße 11–12
10587 Berlin-Charlottenburg

Further information

http://www.ptb.de/de/aktuelles/_helmhsym.html
or
e-mail: markus.baer@ptb.de

for accomodation and further information about
Berlin see: <http://www.berlin.de>



Physikalisch
Technische
Bundesanstalt
Braunschweig und Berlin

8th Hermann-von-Helmholtz-Symposium

Mathematics for Metrology



Metrological Symposium
Physikalisch-Technische Bundesanstalt
Berlin, June 14th, 2005

Physikalisch-Technische Bundesanstalt
Presse- und Öffentlichkeitsarbeit
Bundesallee 100, D-38116 Braunschweig
Telefon: (05 31) 592-30 06, Telefax: (05 31) 592-30 08
E-Mail: presse@ptb.de, Internet: <http://www.ptb.de/> 0,7/405

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