



1 Altstadttrahaus (Old City Hall)
 2 Braunschweiger Löwe (BS Lion)
 3 Burgplatz (Castle Square)



4 Altstadtmarkt (Historic Centre Market)
 5 Schloss Arkaden (Ducal Palace)
 6 Oker (River Oker)

copyright: E. Claus / S. Stork

Venue

The conference will be held at the Physikalisch-Technische Bundesanstalt (PTB).

The PTB is the national metrology institute of Germany providing scientific and technical services. PTB measures with the highest accuracy and reliability - metrology as the core competence.

Physikalisch-Technische Bundesanstalt (PTB)
 Bundesallee 100
 D-38116 Braunschweig, Germany
 Telephone: +49(0)531-592-6201
 Fax: +49(0)531-592-6205

<http://www.ptb.de/CAMCT/>



Braunschweig

With around 245,000 inhabitants, Braunschweig is the biggest city in the area between Hanover and Berlin. It is the centre of the region, as much today as it has been in the past. Today's attractive profile of the "Lion City" is due to its rich and proud history, its steady development as a dynamic place for business, trading, sciences and research as well as its extensive cultural activities.

Conference on Advanced Metrology for Cancer Therapy

November 29th to December 1st
 2011
 Braunschweig
 Germany

Topics

- ✓ Primary and secondary standards of absorbed dose to water for IMRT and brachytherapy
- ✓ 3D dose distributions and treatment planning for IMRT and brachytherapy
- ✓ Hadron therapy (protons and carbon ions)
- ✓ High-Intensity Therapeutic Ultrasound (HITU)
- ✓ International comparisons



Organised by two EURAMET joint research projects, funded by the European Community's Seventh Framework Programme, ERA-NET Plus:

External Beam Cancer Therapy (EBCT) and Increasing Cancer Treatment Efficacy Using 3D Brachytherapy (Brachytherapy)



International Conference on Advanced Metrology for Cancer Therapy

29th Nov – 1st Dec 2011

PTB, Braunschweig, Germany

Physical treatments play a central role in cancer therapy. Metrology is reasonably well-established for only some of these techniques: several modern forms of treatment (IMRT, hadron therapy, HITU, brachytherapy) suffer from the limited support of traceable metrology which restricts the success of these techniques.

The European Union recognised this deficit and identified metrology for health as one of the first four Targeted Programmes in the framework of the European Metrology Research Programme (EMRP), running from 2008 to 2011. The programme includes two EMRP projects which address metrology for cancer therapy:

- project T2.J06 deals with brachytherapy
- project T2.J07 deals with external beam cancer therapy using ionising radiation and high-intensity ultrasound

Primary measurement standards applicable to modern treatment conditions are being developed under both projects, together with measurement techniques which are meant as a basis of future protocols for dosimetry, treatment planning and monitoring.

This three-day scientific conference will provide a platform for the presentation of current developments in clinical measurement techniques for cancer therapy, together with the achievements of these projects, under the headings:

- Primary and secondary standards of absorbed dose to water for IMRT and brachytherapy
- 3D dose distributions and treatment planning for IMRT and brachytherapy
- Hadron therapy (protons and carbon ions)
- High Intensity Therapeutic Ultrasound (HITU)
- International comparisons

The aim of the conference is to provide a forum for the exchange of information and expertise in the community of medical physicists and metrologists at the European level. The conference programme will include keynote talks by invited speakers as well as proffered papers and posters. The call for papers will be issued in April 2011. The number of participants is limited and will be allocated on a first come, first served basis.

For further information about the EMRP projects:

- project T2.J06:
<http://brachytherapy.casaccia.enea.it>
Coordinator Maria-Pia Toni, ENEA.
- project T2.J07:
<http://www.ptb.de/EURAMET-JRP7>
Coordinator Ulrike Ankerhold, PTB.

■ Conference Chair

Ulrike Ankerhold, PTB, Germany

■ Programme Committee

Ulrike Ankerhold, PTB, Germany

Simon Duane, NPL, United Kingdom

Klaus-Vitold Jenderka, PTB, Germany

Hans-Michael Kramer, PTB, Germany

Hans-Joachim Selbach, PTB, Germany

Thorsten Schneider, PTB, Germany

Maria-Pia Toni, ENEA, Italy

■ Conference Secretariat

Please address all correspondence to

Katharina Winkelhoefer

Physikalisch-Technische Bundesanstalt (PTB)

Bundesallee 100

D-38116 Braunschweig, Germany

Telephone: +49(0)531-592-6201

Fax: +49(0)531-592-6205

E-mail: CAMCT@ptb.de

<http://www.ptb.de/CAMCT/>

■ Important Dates

April 15 th , 2011	Call for papers
April 15 th , 2011	Early registration opens
May 1 st , 2011	Abstract submission
July 15 th , 2011	Abstract submission deadline
September 1 st , 2011	Acceptance of abstracts
September 15 th , 2011	Early registration deadline
October 28 th , 2011	Hotel reservation deadline
November 1 st , 2011	Registration closes
December 1 st , 2011	Submission of full paper deadline
Conference fee:	240,- € early registration 290,- € registration after Sept 15 th , 2011