

BESSY II
Albert-Einstein-Str. 15
12489 Berlin



PTB laboratory at BESSY II

Since 1982, PTB has utilized synchrotron radiation for the development of advanced metrology. The activities started at the storage ring BESSY I and moved to BESSY II in Berlin-Adlershof in 1999. The PTB laboratory developed in an European centre for radiometry, used by collaboration partners worldwide. From 2008, the MLS, the new PTB storage ring dedicated to metrology with synchrotron radiation has complemented the spectral range of BESSY II in the VUV, IR and THz spectral ranges.

PTB operates a laboratory with currently nine experimental stations at BESSY II and eight experimental stations at the MLS. PTB offers a broad spectrum of services and calibrations with radiation from the IR to the X-ray range, reaching from routine measurements to powerful metrological system designs in cooperation with partners from industry and research. From the beginning, metrology for the EUV spectral range was one of the core activities of PTB at its synchrotron radiation laboratory.

The measurement capabilities in the EUV spectral range now have been significantly extended by the new EUV beamline at the MLS.

Conference chair

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Further information and online registration

<http://www.euv2011.ptb.de/>

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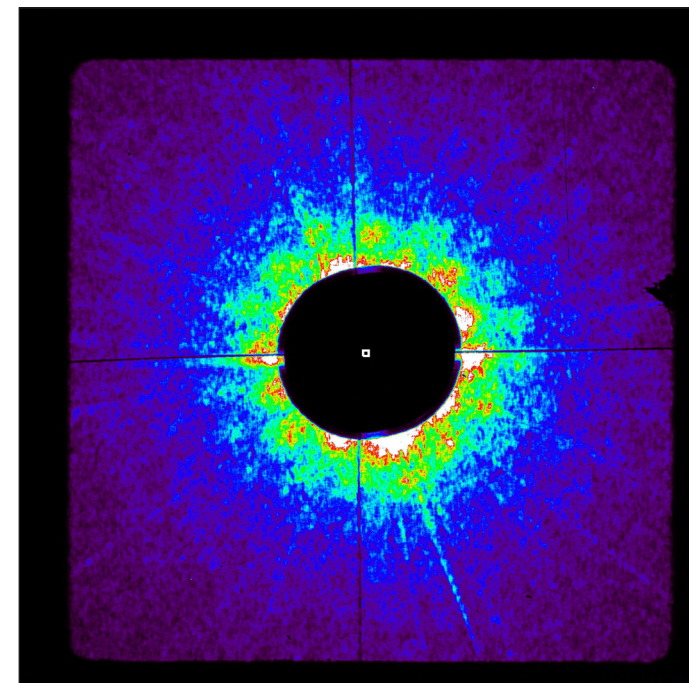


ASML



262nd PTB Seminar EUV Metrology

October 27th - 28th, 2011
Berlin



Scope:

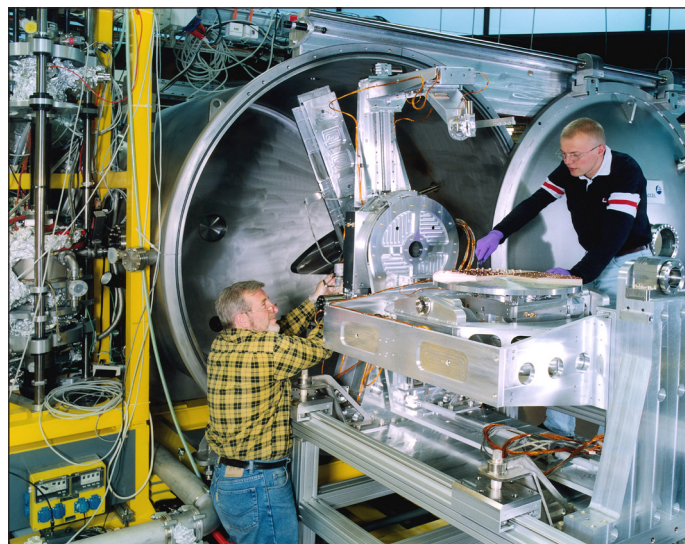
The new EUV radiometry beamline at PTB's storage ring, the Metrology Light Source (MLS), is now ready for operation. We take this opportunity to bring together our partners from science and industry for a seminar in Berlin. The seminar topics include metrological developments and applications in the EUV and soft X-ray spectral range in various fields such as optical industry, lithography, and astrophysics.

Registration fees for attendees:

External attendee: €250.00
€200.00 (early registration until September 30th, 2011)
Student rate: €120.00

Accommodation:

Attendees get discounted rates at the Airporthotel Berlin-Adlershof located near BESSY II. Please check our website for further information.



Installation of the sample manipulator for the EUV reflectometer at BESSY II.

Speakers:

S. Bajt DESY Hamburg
EUV optics for free electron lasers

M. Bender AMTC Dresden
EUV metrology for mask makers

A. BenMoussa ROB Brussels
Developments of detectors for the Extreme Ultraviolet Imager telescopes (EUI) onboard Solar Orbiter

B. Bodermann PTB Braunschweig
VUV and EUV scatterometry

T. Böttger Carl Zeiss SMT Oberkochen
In-house EUV reflectometry at Carl Zeiss SMT

N. Bowering Cymer San Diego
LPP light source development for EUV lithography at Cymer

S. Braun Fraunhofer IWS Dresden
Sputter technologies for the development of EUV and X-ray mirrors

S. Burger ZIB Berlin
Investigation of 3D patterns on EUV masks

T. Gießel BESTEC Berlin
How to specify laboratory instruments

A. Gottwald PTB Berlin
Characterization of VUV and EUV radiation detectors

H. Groß PTB Berlin
Model based uncertainty estimation for inverse scatterometry

L. Haspeslagh IMEC Leuven
Development of reliable EUV detectors

L. Juschkin RWTH Aachen
Metrology applications of XUV laboratory sources

M. Krumrey PTB Berlin
X-ray reflectometry and small angle scattering

C. Laubis PTB Berlin
Characterization of EUV and XUV optical elements

R. Lebert Bruker Bergisch Gladbach
EUV mask reflectometer

E. Louis FOM Rijnhuizen
Multilayer development for next generation EUVL optics

S. Müllender Carl Zeiss SMT Oberkochen
Overview of EUV lithography at Carl Zeiss SMT

L. Nanver TU Delft Delft
Silicon boron-layer photodiodes for detecting low penetration-depth beams

S. Nihtianov ASML Veldhoven
Application challenges of radiation detectors in EUV lithography

M. Perske Fraunhofer IOF Jena
Multilayer coating for EUV collector mirrors

A. Rathsfeld WIAS Berlin
Born approximation for scattering by rough interfaces

F. Schäfers HZB Berlin
EUV and XUV ellipsometry and polarimetry at BESSY

F. Scholze PTB Berlin
The new EUV radiometry beamline at the Metrology Light Source

L. Shi TU Delft Delft
EUV detector radiation and environmental hardness

H. Stiel MBI Berlin
Laser based plasma sources for XUV

R. Vest NIST Gaithersburg
EUV metrology at NIST SURF III for lithography, astronomy, solar physics, and particle detection applications

S. Yulin Fraunhofer IOF Jena
Development of EUV/X-ray multilayer optics in IOF

U. Zeitner Fraunhofer IOF Jena
Gratings for short wavelengths