

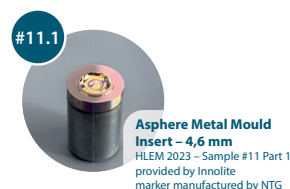


Kompetenzzentrum
Ultrapräzise
Oberflächen-
bearbeitung e.V.

Workshop 2024 Lenses



**Double-Sided Asphere
Concave – 28 mm**
HLEM 2023 – Sample #10 Part 1
provided by Leica Camera
marker manufactured by NTG



**Asphere Metal Mould
Insert – 4,6 mm**
HLEM 2023 – Sample #11 Part 1
provided by Innolite
marker manufactured by NTG



Aspheric Lens – 10 mm
HLEM 2023 – Sample #12 Part 1
marker manufactured by NTG



**Double-Sided Asphere
Convex – 25 mm**
HLEM 2023 – Sample #13 Part 1
provided by Edmund Optics
marker manufactured by NTG
for determining inner centration

Programme Committee

Jean-Michel Asfour; Dioptic GmbH,
Andreas Beutler; Mahr GmbH
Harald Bosse; CC UPOB e.V.
Ines Fortmeier; PTB
Thomas Franz; NTG GmbH & Co. KG
Rudolf Meeß; CC UPOB e.V.
Oltmann Riemer; Leibniz-Institut IWT

Key Dates

Measurement Schedule	Dates
Application for measurements	Open for next meeting in 2025
Start of measurements	1 st June 2023
Deadline for submission of author and title	1 st December 2023
Deadline for performing measurements	1 st February 2024
Deadline to submit your measured data for comparison	2 weeks after the end of your measurement period
Deadlines for Non-Measurement Contributions	
Abstracts	15 th November 2023
Registration for Industrial Exhibition	10 th March 2024
Exhibition stands are assigned according to the principle: first come first serve.	
Participation Schedule	
Registration start	Spring 2024
Registration deadline	1 st March 2024

Organizational Details

Date	12 th - 13 th March 2024
Language	English
Registration	By letter, fax or e-mail using the registration form available at www.upob.de . You will receive a confirmation.
Accommodation	www.upob.de/Veranstaltungen
Attendance fee	
Lecturers	€ 250 (1 st person)
Members	€ 250
W3+FAIR Exhibitors	€ 500
Wetzlar Network	€ 500
Non-members	€ 650
Please pay in advance after you have received the invoice.	

Contact

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12th Workshop 2024 Asphere Metrology

microlenses
metrology
comparison
interferometry measurements
lenses *polishing*
subsurface damage alignment
asphere metrology
optical systems **precision optics**
centering samples
CGH
inner centration **assembly**
free-form
development
large mirrors
space optics

12th - 13th March 2024
Buderus Arena, Wetzlar



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12th Workshop Asphere Metrology



Background

Our series of High-Level Expert Meetings (HLEM) and Workshops has cultivated excellent exchanges between experts in aspheric metrology for more than a decade. We have always been very proud to welcome academia and leading manufacturers of measurement devices as driving forces in all our events. They have shared progress on a high scientific level. Asphere metrology has become more comparable and precise with all their input. In addition, the metrology user has been able to learn about various measurement systems and their potential and thus has benefited from our series of events too.

We will continue to meet this high standard with our next Workshop in 2024. The very important round-robin measurements will place in the run-up to the event with 4 lenses. In addition, as accompanying topics are planned this time:

- Measurement of small optics, e.g. for endoscopes and mobile phones,
- Inner centration of aspheres,
- Measurement of unmounted aspheres,
- Developments in measuring techniques for aspherical, free-form and cylindrical lenses.
- Assembly of Optical Systems
- Free-Form and Space Optics

Your contributions are very welcome!

“Our” popular exhibition area of participating companies will round off the program.

Would you like to...

- participate in the measurements?
- give a lecture on the planned topics?
- present your institution at the company exhibition?
- get one of the awards?

Please register and feel free to contact us!

Programme

March 12th 2024

12:00 Welcome to Workshop Asphere Metrology 2024 – Opening, Overview and Outlook
*Harald Bosse,
CC UPOB e. V.,
Germany*

Session Assembly of Optical Systems

*Chair: Jean-Michel Asfour,
DIOPTIC GmbH,
Germany*

Keynote:
Effective Optical System
Assembly by Ultra-Precise
Manufactured References
*Andreas Gebhardt,
Fraunhofer IOF,
Germany*

Centration Testing of Aspheres
*Andreas Kerkmann,
TRIOPTICS GmbH,
Germany*

Lunch, Coffee Break and Technical Exhibition

Centering Turning of Mounted
Optics and Lasers
*Christian Wenzel,
INNOLITE GmbH,
Germany*

Why you Won't get a Perfect
Asphere Considering Inner
Centration and Polishing Errors
*Engelbert Hofbauer,
Hofbauer Optik Mess-&Prüftechnik,
Germany*

Session Measurements on Current HLEM Samples

*Chair: Andreas Beutler,
Mahr GmbH,
Germany*

Non-Contact 3D Form Meas-
urement of Precision Optics
*Nina Hennemann,
Taylor Hobson,
Germany*

Measurement of Aspheric
Lenses by VSPOT Technology
*Ronald Kometer,
Hofbauer Optik Mess-&Prüftechnik,
Germany*

Coffee Break and Technical Exhibition

Applications with White-Light-
Interferometry for the Charac-
terization of Optical Surfaces
*Özgür Tan,
Polytec GmbH,
Germany*

Measurement Comparisons
within the Framework of CC
UPOB e. V.
*Ines Fortmeier,
Physikalisch-Technische Bundesanstalt,
Germany*

Discussion on Comparison and
Summary
Session Chair

17:45 Closing of First Day
Session Chair

19:00 Conference Dinner
in Local Restaurant in Wetzlar
Please find details on www.upob.de

Programme

March 13th 2024

Session Free-Form and Space Optics

*Chair: Oltmann Riemer,
Leibniz-Institut für Werkstoff-
orientierte Technologien – IWT,
Germany*

8:45 Welcome Coffee and
Technical Exhibition

9:30 Opening of Second Day
Session Chair

Keynote:
Freeform Optics: Technological
Progress and Application
Development
*Fengzhou Fang,
CIRP President, Tianjin University
and University College Dublin;
PRC and Ireland*

Testing Large Cassegrain
Secondary Mirrors using
Diffractive Null Lenses
*Paul Rees,
Glyndwr Innovations Ltd,
United Kingdom*

Application of the Hexagon
Multiline System for Form
Measurement and Alignment
of Large Mirrors
*Heinrich Schwenke,
Hexagon AICON ETALON GmbH,
Germany*

Coffee Break and Technical Exhibition

Entanglement of Power and
Spherical Aberration in the
Metrology of the PLATO
Aspherical Lenses
*Massimiliano Rossi,
Media Lario Srl,
Italy*

Precision Measurements using
Computer Generated Holo-
grams in the Manufacturing
and Alignment of Large Lens
Systems
*Frank Grupp,
Max-Planck-Institut für extraterres-
trische Physik (MPE) / Grupp-Astro,
Germany*

Evaluation of Microlens Arrays
using UA3P
*Reinhard Windemuth,
Panasonic Connect Europe GmbH,
Germany*

Subsurface Damage in
Diamond Machined Advanced
Material
*Oltmann Riemer and Kai Rickens,
Leibniz-Institut für Werkstoff-
orientierte Technologien – IWT,
Germany*

Summary and Final Discussion
Session Chair

Conference Closing and
Outlook
*Harald Bosse,
CC UPOB e. V.,
Germany*

13:50 End of Workshop and
Visit of the W3+FAIR
Light Lunch

17:30 Good Bye
W3+ FAIR-Apero in Foyer of
Buderus Arena in Wetzlar
Please find Details on www.upob.de