



6th High Level Expert Meeting 2013

Asphere Metrology

Detailed Programme

1st Day Wednesday, 13 November 2013 / **Morning**
Chair: Dr. Michael Schulz; PTB; Germany

9:00	Registration
10:00	Conference Opening and Overview Prof. Dr.-Ing. Frank Löffler; CC UPOB e.V.; Germany
10:10	General Information on Topic Comparability Dr. Michael Schulz; PTB; Germany
	Session – Interferometry
10:20	Recent Developments in Subaperture Stitching Interferometry of Aspheres and Free-Forms; Dr. Andrew Kulawiec; QED; USA
10:50	Comparing Measurement Results: The Radius Issue Christoph Pruss; University Stuttgart ITO; Germany
11:20	Coffee Break and Interesting Table Top Presentations
	Session – Single Point Measurement
11:50	Recent Technology for Asphere and Free-Form Measurement by UA3P; Keishi Kubo; Panasonic Corporation; Japan
12:20	Tactile and Contactless Measurement of an Optical Surface; Roland Maurer; TH Deggendorf; Germany
12:50	Lunch Break and Interesting Table Top Presentations

1st Day Wednesday, 13 November 2013 / **Afternoon**
Chair: Gunter Schneider; Schneider GmbH & Co. KG; Germany

12:50	Lunch Break and Interesting Table Top Presentations
13:50	Measurement Applications for Ultra-Precision 3D Coordinate Metrology; Michiel Baas; IBS Precision Engineering; The Netherlands
14:20	Manufacturing and Measurement of Aspheres, Acylinders and Free-Form Optics; Dr. Georg Böhm; IOM; Germany
14:50	Measurement of Non-Standard Aspheres and Discontinuous Optics; Dr. Gernot Berger; Lufos GmbH; Germany
15:15	Coffee Break and Interesting Table Top Presentations
15:40	Parallel Measurement on Free-Form Optics with Optical Surfaces on Both Sides; Dr. Michael Quinten; Fries Research & Technology GmbH; Germany
16:10	Precision Measurement of Large Optical Surfaces Prof. Dr. Engelbert Hofbauer; TH Deggendorf; Germany
16:40	Tactile Probe Systems in Comparison with Optical Point Sensors for Measuring Optical Components Dr. Andreas Beutler; Mahr GmbH; Germany
17:10	Closing
19:00	Conference Dinner



6th High Level Expert Meeting 2013

Asphere Metrology

Detailed Programme

2nd Day Thursday, 14 November 2013 / **Morning**
Chair: Dr. Klaus F. Beckstette; Carl Zeiss Jena GmbH; Germany

9:00 Opening

Session – Deflectometry / Raytracing

9:05 Measurement of Ultra Precise Aspheric Mirrors
Dr. Frank Siewert; Helmholtz Zentrum Berlin; Germany

9:35 Areal Absolute Form Measurement of Optical Surfaces using Phase Measuring Deflectometry and Shearing Interferometry;
Marc Sandner; BIAS - Bremen Institute for Applied Beam Technology; Germany

10:05 Quantitative Deflectometry Challenges Interferometry
Evelyn Olesch; University Erlangen-Nuermberg; Germany

10:35 Coffee Break and Interesting Table Top Presentations

Session – CGH

11:05 Testing High NA Cylinder Surfaces Using Special CGHs, Called Diffractive Transmission Cylinders (DTC)
Dr. Frank Weidner; DIOPTIC GmbH; Germany

11:35 Metrology of High Precision Free-Form Mirrors with Advanced Computer-Generated-Holograms
Matthias Beier; Fraunhofer IOF; Germany

12:05 Calibration Methods to Increase the Measurement Precision of Interferometric Asphere Testing Using CGHs
Dr. Frank Weidner; DIOPTIC GmbH; Germany

2nd Day Thursday, 14 November 2013 / **Afternoon**
Chair: Dr. Axel Schindler; NTG GmbH; Germany

12:35 Lunch Break and Interesting Table Top Presentations

Session – Standardization / Others

13:35 Capabilities of Ion Beam Figuring Technology for Asphere Manufacturing; Dr. David Schäfer; NTG GmbH & Co. KG; Germany

14:05 Development of Aspherical Standard Specimens
Genot Blobel; PTB; Germany

14:35 Summary
Dr. Michael Schulz; PTB; Germany

14:55 **Conference Closing**