

DAY 1	Tuesday, March 28 th , 2023 Chair: Harald Bosse, CC UPOB e.V., Germany	Morning
10:00	Arrival Registration Welcome Coffee Technical Exhibition	
11:00	Welcome to HLEM 2023 – Conference Opening, Overview and Outlook Harald Bosse, CC UPOB e.V., Germany	
11:15	The Revolution of Free-Form Micro-Optics: From Design and Prototyping to Replication and Metrology Jessica van Heck, PHABULOuS Pilot Line Association; Switzerland	
11:45	Introduction to HLEM 2023 – Short Overview on Samples and Background of Measurements Jean-Michel Asfour, DIOPTIC GmbH, Germany	





DAY 1	Tuesday, March 28 th , 2023 Session - Round Robin: Measurement Technologies and Results Chair: Jean-Michel Asfour, DIOPTIC GmbH, Germany	Afternoon
12:00	Panasonic UA3P: UPOB Sample Results – Technical News About the UA3P System Tomofumi Morishita, Panasonic, Japan	
12:30	Lunch, Coffee Break and Technical Exhibition	group photo time!
13:30	Precision Measurement of Small Optics Including Relational Datum Parameters by use of a Scanning Point Marc Wendel, Taylor Hobson, Germany	
14:00	Capabilities of Multi-Sensor Technologies for the Measurement of Molds and Complex Optics Mario Fischer, Mahr GmbH, Germany	
14:30	Round Robin HLEM 2023 – Measurement of Aspheric Lenses by New VSPOT Technology Ronald Kometer, Hofbauer Optik Mess-& Prüftechnik, Germany	
14:55	Simple Centering Technology on Aspheres – also Double-Sided Engelbert Hofbauer, Hofbauer Optik Mess-& Prüftechnik, Germany	
15:05	Coffee Break and Technical Exhibition	





DAY 1	Tuesday, March 28 th , 2023 Session - Round Robin: Measurement Technologies and Results Chair: Jean-Michel Asfour, Dioptic GmbH, Germany	Afternoon
15:05	Coffee Break and Technical Exhibition	
15:45	Recent Measurements on Aspherical Test Samples Cord Brüggemann, Fisba AG, Switzerland	
16:15	Centration Measurements of Double-Sided Aspheres Andreas Kerkmann, Trioptics GmbH, Germany	
16:45	Comparison Results of Form and Inner Centration Measurements of Double-Sided Aspheres Ines Fortmeier, Physikalisch-Technische Bundesanstalt, Germany	
17:15	Discussion on Comparison and Summary Session Chair	
17:30	Closing of First Day Session Chair	
19:00	Conference Dinner in Local Restaurant in Wetzlar Please find details on www.upob.de	
23:30	Good Night!	





DAY 2	Wednesday, March 29 th , 2023 Session - Additional Topics Chair: Oltmann Riemer, Leibniz-Institut für Werkstofforientierte Technologien - IWT, Germany	Morning
8:45	Welcome Coffee and Technical Exhibition	
9:30	Opening of Second Day Session Chair	
9:35	European Metrology Network for Advanced Manufacturing Harald Bosse, Physikalisch-Technische Bundesanstalt, Germany	
10:05	Plasma Jet Polishing of Freeform Optics Thomas Arnold, Leibniz Institute of Surface Engineering – IOM, Germany	
10:35	Metrology in Additive Micro-Optic Fabrication Joshua Trapp, University Stuttgart – ITO, Germany	
11:00	Coffee Break and Technical Exhibition	Survey 11:00-13:00





DAY 2	Wednesday, March 29 th , 2023 Session - Additional Topics Chair: Oltmann Riemer, Leibniz-Institut für Werkstofforientierte Technologien - IWT, Germany	Morning
11:00	Coffee Break and Technical Exhibition	Survey 11:00-13:00
11:45	Data Transport in the Production Chain of Freeform Optical Components Andreas Beutler, Mahr GmbH, Germany	
12:15	Summary and Final Discussion Session Chair	
12:30	Conference Closing and Outlook Harald Bosse, CC UPOB e.V., Germany	
13:00	End of HLEM 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	

