

Session 1.4 Precision engineering and optics

Time: Tuesday, 05.09.2023

Location: Humboldtbaubau, Lecture Room 129.

Chairman: R. Theska (D-Ilmenau)

1:30 p.m.	R. Hebenstreit, R. Theska (D-Ilmenau)
Calibration of positioning microsystems with subatomic accuracy	
1:50 p.m.	T. Erbe (NL, Eindhoven), S. Linß(D-Ilmenau)
Flexure hinge-based lens manipulators – a concept survey	
2:10 p.m.	M. Miettinen, R. Viitala (FL, Espoo), R. Theska (D-Ilmenau)
Aerostatic bearing deformation and air gap height measurement	
2:30 p.m.	F. Pollinger, G. Prellinger (D-Braunschweig), M. Krauhausen, R. Priem (D-Aachen)
High-resolution absolute range sensors based on the combination of frequency modulation synthetic wavelength interferometry and laser triangulation for heavy industry applications	
2:50 – 3:10 p.m. Coffee break and Visits of Expositions	
3:10 p.m.	F. Weigert, M. Wolf, R. Theska (D-Ilmenau)
Development of a tool-changing system for nanofabrication machines	
3:30 p.m.	C. Hahm, R. Theska (D-Ilmenau), T. Erbe (NL)
Cement-bound mineral casted parts in precision engineering	
3:50 p.m.	M. Layher, J. Bliedtner (D-Jena), R. Theska (D-Ilmenau)
A laser beam deflection system for heat treatments in large scale additive manufacturing	
End of Session	