Session 1.1 Precision measurement technology

Time: Monday, 04.09.2023
Location: Humboldtbau, HU-HS
Chairman: E. Manske (D-Ilmenau)

1:30 p.m.	Invited lecture T. Dziomba, A. Felgner, S. Gao (D-Braunschweig), M. Hemmleb (D-Halle), M. Ritter (D-Hamburg), E. Gärtner, J. Frühauf (D-Limbach-Oberfrohna)
How reliable are optical measurements of surface roughness?	
2:00 p.m.	Xin Xu, T. Pahl, H. Serbes, P. Lehmann (D-Kassel)
Robust algorithm for profilometry of very rough surfaces by applying focus variation microscopy	
2:20 p.m.	J. Belkner, J. Stauffenberg, J. Döll, C. Koppka, M. Breiter, I. Ortlepp, U. Gerhardt, E. Manske (D-Ilmenau)
High frequent, low noise and robust differential confocal microscopy on a Nano-Positioning Machine	
2:40 p.m.	L. Kumanchik, C. Braxmaier (D-Ulm)
Self-calibrating opto-mechanical inertial sensor with traceability to the SI	
3:00 – 3:20 p.m. Coffee break and Visits of Expositions	
3:20 p.m.	C. Möller, T. Klein, T. Ortlepp (D-Erfurt), I. Ortlepp, E. Manske (D-Ilmenau)
Transparent photodiodes for standing wave interferometer	
3:40 p.m.	V. Shmagun, U. Gerhardt, E. Manske, T. Fröhlich, T. Kissinger (D-Ilmenau)
Resolution enhancement in Fabry-Perot interferometers through evaluation of multiple reflection using range-resolved interferometry	

4:00 p.m.	M. Meier, C. Weichert, J. Flügge (D-Braunschweig)
Comparison of fully fiber-coupled interferometer systems under vacuum Conditions	
4:20 p.m.	S. J. Fischer Calderon, G. Straube, T. Kissinger (D-Ilmenau)
A novel point-to-point length measurement concept based on range-resolved interferometry	
4:40 p.m.	P. Köchert, C. Weichert, J. Flügge (D-Braunschweig)
Online Heydemann correction of displacement measuring interferometers	
End of Session	