

## **International Scientific Symposium**

on the occasion of World Interferometry Day 2023

**Date:** **Monday, April 17, 2022, 10:00 – 17:00**

**Location:** TU Ilmenau, Faraday Hs

**Program:**

- 10:00** **Welcome Address and Introduction**  
Vizepräsident für Forschung Prof. Stefan Sinzinger,  
Prof. Eberhard Manske, TU Ilmenau
- 10:10** **Gravitational wave detection in space and on ground with laser interferometers**  
Prof. Oliver Gerberding, Universität Hamburg
- 10:35** **Interferometric sensor networks for noise cancellation in gravitational wave detectors**  
Prof. Katharina-Sophie Isleif, Helmut-Schmidt-Universität Hamburg
- 11:00** **On the importance of calibration in interferometric measurements - How do we measure absolutely?**  
Prof. Stephan Reichelt, ITO Universität Stuttgart
- 11:25** **Interferometry: It's all about phase!**  
Dr. Thomas Kinder, TEM Messtechnik GmbH
- 11:50** **Midday Break and Poster Session**
- 12:45** **Modeling, Simulation and Limitations of Interference Microscopy**  
Prof. Dr. Peter Lehmann, Universität Kassel
- 13:10** **The impact of massive parallel data processing on interferometry**  
Matthias Liedmann, Gesellschaft für Bild- und Signalverarbeitung (GBS) mbH
- 13:35** **Multi-wavelength interferometry for SI-traceable absolute long-distance measurement**  
Dr. Florian Pollinger, Physikalisch-Technische Bundesanstalt
- 14:00** **Coffee Break**
- 14:20** **Standing Wave Interferometry - Devices, Setups and Signal Processing**  
Dr. Ingo Ortlepp, TU Ilmenau
- 14:45** **High-accurate step gage calibration on CMMs using laser interferometer as scales**  
Dr. Felix Balzer, Hexagon AB
- 15:10** **Closing Remarks**

16:00

Opening of the Labs and Demonstrations