

# TWO WEBINARS ON NANOMETROLOGY

## Instrumentation 7.12.2023

Webinar on nanometrology instrumentation, especially on high-speed long-range scanning probe microscopes (SPM).

**Preliminary program** (subject to change):

December 7, 2023, 9:00 – 11:30 (CET)

**MetExSPM project: Development of traceable methods for high-speed and large-range SPM** *Virpi Korpelainen*, VTT Technical Research Centre of Finland

**Active cantilevers** *Ivo Rangelow*, nano analytik GmbH

**A high-speed large-range SPM scanner based on a magnetic levitation stage and piezo scanners** *Rudolf Krueger*, Physik Instrumente (PI) GmbH

**Data processing in metrological high-speed scanning probe microscopes** *Petr Klapetek*, CMI Czech Metrology Institute

**A high-speed large-range SPM prototype** *Jan Thiesler*, PTB Physikalisch-Technische Bundesanstalt

**Applications of open hardware Gwyscope controller for adaptive and high-speed SPM** *Miroslav Valtr*, CMI Czech Metrology Institute

**Grating pitch data evaluation methods – good parameter choices and accuracy** *David Nečas*, CEITEC, Brno University of Technology

### Microsoft Teams meeting

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 Meeting ID: 322 958 243 470, Passcode: Ly6Bn8; [Join on the web](#)

## Applications 8.1.2024

Webinar on applications of nanometrology, scanning probe microscopes (SPM) and nanopositioning & nanomeasuring machines.

**Preliminary program** (subject to change):

January 8, 2024, 9:00 – 11:30 (CET)

**MetExSPM project: Development of traceable methods for high-speed and large-range SPM** *Virpi Korpelainen*, VTT Technical Research Centre of Finland

**Application of nanometrology to improve nanopositioning stages in high-speed AFM** *Edward Heaps*, NPL National Physical Laboratory

**Traceable surface and nanometrology: nanopositioning & nanomeasuring machine at PTB** *Gaoliang Dai*, PTB Physikalisch-Technische Bundesanstalt

**Application of active piezoresistive cantilevers in high-eigenmode surface imaging** *Teodor Gotszalk*, Wrocław University of Science and Technology

**Implementation of interferometers in a commercial SPM to extend positioning capabilities** *Bruno Sauvet*, VTT Technical Research Centre of Finland

**Compressed sensing method for scanning probe microscopy based on Gaussian processes** *Radek Šlesinger*, CMI Czech Metrology Institute

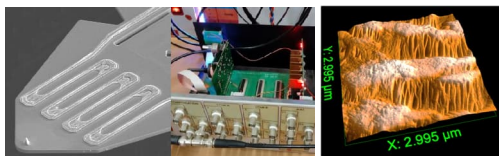
**Application of active AFM cantilever systems in nanopositioning and nanomeasuring machines** *Eberhard Manske*, Technische Universität Ilmenau

### Microsoft Teams meeting

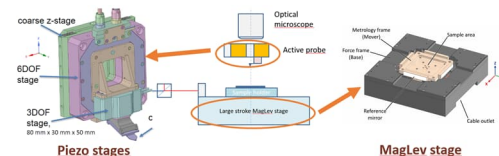
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**MetExSPM** will turn high-speed SPMs from qualitative imaging devices to high-accuracy quantitative instruments by developing:

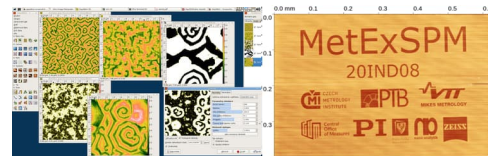
### Novel multifunctional probes and electronics



### High-speed large stroke scanning stages



### Software and advanced scanning strategies



### Validated and traceable high-speed SPM

