

DPG-Frühjahrstagung der Sektion Kondensierte Materie
und des Fachverbandes Mikrosonden
Dresden, 2014-03-30 – 2014-04-04

Symposium **Microanalysis and Microscopy**

The Microprobes (MI) division of the German Physical Society represents a platform for the discussion and the information exchange in the field of micro- and nanoanalysis of condensed matter. The broad scope of this division covers all probe methods and microscopy techniques with photons, electrons, positrons and ions to investigate the relation between structure and properties of materials. The Symposium "Microanalysis and Microscopy" is scheduled with tutorials, invited talks, contributed talks, and posters from Sunday 2014-03-30 (Tutorial day) to Thursday 2014-04-03. The Symposium of the Microprobes division is embedded in the Spring meeting of the Condensed Matter Section covering the complete field of solid state physics.

Topics

- **Synchrotron radiation and solid state analysis**
(Focussed Session together with the Committee of Acceleration Physics)
- **Crystallography in materials science**
(Joint Session with several divisions of the DPG Condensed Mater Section)
- **Shape memory alloys (Joint session with the Crystallography division)**
- **Positron annihilation studies of condensed matter** (with **Tutorials**)
- Analytical electron microscopy: SEM- and TEM-based material analysis
- EDX and EELS
- Cathodoluminescence and EBIC microscopy
- EBSD and related techniques
- Ion beam methods
- Kossel microdiffraction
- Progress of microprobe instrumentation and methods
- Quantitative materials analysis at the micro or nanoscale
- Scanning probe microscopies
- X-ray spectrometry and tomography
- X-ray imaging
- Analysis of work of art and of archeological artefacts
- Microprobes Division general topics

Invited talks (requested) and Tutorials

Christoph Hugenschmidt (TU München): *Tutorial Positrons probing matter*

Liviu Chioncel (U Augsburg): *Tutorial Many-body effects on the momentum density of transition metal elements*

Andreas Wagner (HZDR Dresden-Rossendorf): *Tutorial Positron beam EPOS at HZDR*

Kristin L. Bunker (MAS president/RJ Lee Group, Inc., USA): *Characterization of nanoparticles and assessment of health issues*

Andreas Danilewsky (U Freiburg): *White-beam topography*

Fritjof Nolting (Swiss Light Source): *X-ray characterization of magnetic materials*

Jaromír Kopeček (FZU Prague, Czech): *EBSD analysis of ferromagnetic shape memory alloys*

Vadim Migunov (Ernst Ruska Center Jülich): *In situ TEM of InAs nanowires*

Torsten Staab (U Würzburg): *Positron microprobe*

Abstract submission (Deadline: December 15, 2014)

online at www.dpg-tagung.de/dd14/submission.html?language=en

(go in the first input field to MI: Microprobes division)

Einreichung auf Deutsch ist natürlich auch möglich:

www.dpg-tagung.de/dd14/submission.html?language=de

Registration:

dresden14.dpg-tagungen.de/index.html?lang=en&

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See as well:

www.dpg-physik.de/dpg/gliederung/fv/mi/index.html