

**DFG Schwerpunktprogramm / Priority Programme
Compositionally Complex Alloys – High Entropy
Alloys (CCA-HEA)**



Contact: Dr. Andrea Fantin (TU Berlin / HZ Berlin)

subgroup meeting “Large scale facility-based techniques”

2nd November 2021

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List of confirmed speakers and tentative topics:

8.45 – 9.05 A. Fantin (TU Berlin & HZB): Introduction to large-scale facilities & synchrotron radiation;

First part: diffraction-based techniques

9.05 – 9.30 P. Suarez Ocano (BAM, Germany) In-situ monitoring of growing oxidation of the Chemically Complex Alloy AlMo0.5NbTa0.5TiZr in the High Temperature Regime using synchrotron radiation.

9.30 – 9.55 E. Zaiser (TU Berlin, Germany) Using synchrotron diffraction to determine lattice parameters of compositionally complex alloys

9.55 – 10.20 S. Checchia (ESRF, France) Pair Distribution function technique and preliminary results on hcp HEA Al15Sc10Ti25Zr25Hf25

10.20 – 10.55 A. Minelli (University of Oxford, UK) Diffuse scattering: a useful tool for looking at local disorder

10.55 – 11.15 Break

Second part: spectroscopy-based techniques

11.15 – 11.40 K. Yusenko (BAM, Germany) Studies of high-entropy alloys using X-ray absorption fine structure at the BAMline

11.40 – 12.05 A. Smekhova (HZB, Germany) Synchrotron-based studies of high-entropy alloys on atomic scale: a focus on Alx-CrFeCoNi

12.05 – 12.30 G. O. Lepore (Università degli studi di Firenze, Italy): X-ray absorption spectroscopy technique and preliminary results on hcp HEA Al15Sc10Ti25Zr25Hf25

12.30 – 12.55 S. Kasatikov (Saint-Petersburg state University, Russia): Investigation of chemical and electronic properties of CCAs/HEAs by means of X-ray spectrosc