



STREAMLINE


# ESRF-EBS Workshop on Dark Field X-ray Microscopy

15 – 17 April 2020

## PRELIMINARY PROGRAMME

Wednesday 15 April



11:30 – 12:30	<b>Registration</b>
12:00 – 13:30	<i>Lunch at the EPN campus restaurant</i>
13:30 – 13:45	<b>Welcome and introduction to ESBS</b> (Harald Reichert, director of research, ESRF)
13:45 – 14:00	<b>Scopes and objectives of the workshop</b> (Carsten Detlefs, scientist at the ESRF)
<b>Session 1 - Metallurgy</b> (Chair: H. F. Poulsen)	
14:00 – 14:40	<b>Ragnvald Mathiesen</b> , Norwegian University of Technology (NTNU), Trondheim, Norway <b>Novel opportunities in material science with in situ hard X-ray microscopy</b>
14:40 – 15:00	<b>Contributed Talk 1</b>
15:00 – 15:40	<b>Leora Dresselhaus-Cooper</b> , Lawrence Livermore National Laboratory, USA <b>Revealing Dynamics in Defects with Time-Resolved Dark-Field X-ray Microscopy</b>
15:40 – 16:10	<i>Coffee Break</i>
<b>Session 2 - Ferroelectrics and functional materials</b> (Chair: X.XXX)	
16:10 – 16:50	<b>Hugh Simons</b> , Technical University of Denmark, Lyngby, Denmark <b>To be confirmed</b>
16:50 – 17:10	<b>Contributed Talk 2</b>
17:10 – 17:30	<b>Contributed Talk 3</b>
17:30 – 18:30	 <b>Poster Session ?</b>
18:30 – 20:30	<i>Buffet dinner (apéritif dinatoire)</i>

**Session 3 - Ferroelectrics and functional materials (Chair: H. Simons)**

09:00 – 09:40 **Lukas Porz**, Technical University of Darmstadt, Germany  
**Opportunities and challenges in quantitative 3D imaging of dislocations in ceramics**

09:40 – 10:00 **Contributed Talk 4**

10:00 – 10:20 **Contributed Talk 5**

10:20 – 10:50 *Coffee break*

**Session 4 - Phase transitions (Chair: C. Detlefs)**

10:50 – 11:30 **Ashley Bucsek**, University of Michigan, Ann Arbor, USA  
**Opportunities for Studying Phase Transformations and Twinning in Metal Alloys with Dark Field X-ray Microscopy**

11:30 – 11:50 **Contributed Talk 6**

11:50 – 12:10 **Contributed Talk 7**

12:10 – 13:40 *Lunch at EPN campus restaurant*

**Session 5 - XXX (Chair: X. XXX)**

13:40 – 14:00 **Jacob Bowen**, Technical University of Denmark, Lyngby, Denmark  
**In-operando Dark Field X-ray Microscopy experiments on Solid Oxide Cells**

14:00 – 14:20 **Contributed Talk 8**

14:20 – 14:40 **Contributed Talk 9**

**Session 6 - XXX (Chair: X. XXX)**

14:40 – 15:00 **Vanessa Schoeppler**, Technical University Dresden, Center for Molecular Bioengineering, Dresden, Germany  
**The role of residual stresses in biomineral morphogenesis revealed by 3D dark-field x-ray**

15:00 – 15:20 **Contributed Talk 10**

15:20 – 15:50 *Coffee Break*

**Session 7 - XXX (Chair: X. XXX)**

15:50 – 16:30 **Sven Gustafson**, Purdue University, USA  
**To be confirmed**

16:30 – 16:50 **Contributed Talk 11**

16:50 – 17:10 **Contributed Talk 12**

*Transfer to Restaurant*

19:30 – 22:00 *Workshop Dinner*



**Session 8 - XXX (Chair: X. XXX)**

09:00 – 09:20 **Jozef Keckes**, Montanuniversität Leoben, Leoben, Austria  
**Mosaicity and Strain Gradients across TiC and TiN Particles in Steel Matrix Composites Revealed by DFXM**

09:20 – 09:40 **Contributed Talk 13**

09:40 – 10:00 **Contributed Talk 14**

10:00 – 10:30 *Coffee break*

**Session 9 - XXX (Chair: X. XXX)**

10:30 – 11:10 **Can Yildirim**, CEA-Leti, Grenoble, France  
**A Multi-scale Study of Recovery and Recrystallization in Cold Rolled Fe-Si and Fe-Si-Sn Alloys**

11:10 – 11:30 **Contributed Talk 15**

11:30 – 12:00 **Discussion Session**

12:00 – 13:30 *Lunch at EPN campus restaurant*

**End of Workshop**