

# PETRA IV Coherence Workshop

(June 26 –June 28, 2017, FLASH SemRoom, Bldg. 28c)

## Tentative schedule

### Monday, June 26, 2017

12:30 Registration

#### Introduction

13:30 *Christian Schroer (DESY Photon Science)*  
Science at PETRA III + IV: Conditions and Opportunities

14:00 *Ilya Agapov (DESY Accelerators)*  
Status of the PETRA IV Accelerator Studies

14:30 Discussion

15:00 Coffee break

#### Session 1: Coherence Keynote Talks

15:30 *Ian Robinson (Brookhaven National Laboratory, USA)*  
Bragg Coherent Diffractive Imaging with Even More Coherence

16:00 *Bob Leheny (John Hopkins University, Baltimore MD, USA)*

16:30 *Tim Salditt (University of Göttingen, Germany)*  
Imaging of Cells and Tissues at Full Field and Full Coherence

17:00 *Bogdan Sepiol (Universität Wien, Austria)*  
Title: t.b.a.

17:30 – Discussion

19:00 – Dinner at DESY Bistro

**Tuesday, June 27, 2017**

**Session 2: Coherent Imaging**

9:00 *Olivier Thomas (Marseille University, France)*  
Probing elementary mechanisms of plastic deformation with coherent diffraction imaging: from intermittent observation of single defects to real time dynamics?

9:30 *Yukio Takahashi (Osaka University, Japan)*  
High-Resolution and High-Sensitivity X-ray Ptychography at SPring-8: Recent Progress and Future Prospects.

10:00 *Martin Holt (Advanced Photon Source, Argonne National Laboratory, USA)*  
Coherent diffraction imaging using nanoscale focusing optics

10:30 Coffee break

**Session 3: XPCS**

11:00 *Giulio Monaco (University of Trento, Italy)*  
Title: t.b.a.

11:30 *Felix Lehmkuhler (DESY)*  
Title: t.b.a.

12:00 *Alec Sandy (Argonne National Laboratory, USA)*  
Title: t.b.a.

12:30 Discussion

13:00 Lunch

**Session 4: Coherent Imaging, beamlines**

14:30 *Ross Harder (Advanced Photon Source, Argonne National Laboratory, USA)*  
A beamline for extremely high resolution coherent imaging of atomistic structures.

15:00 *Ana Diaz (Swiss Light Source, Paul Scherrer Institute, Switzerland)*  
X-ray ptychography: state of the art and bright perspectives for the future

15:30 *Tobias Schulli (European Synchrotron Radiation Facility, France)*  
Coherent Diffraction imaging techniques on DLSR: beamlines and experiments meet scientific dreams

16:00 – Discussion/Coffee break

**Session 5: XPCS, beamlines**

16:30 *Yuriy Chuskin (ESRF, France)*

Title: t.b.a.

17:00 *Michael Sprung (DESY)*

Title: t.b.a.

17:30 *Andrei Fluerasu (Brookhaven National Laboratory, USA)*

Title t.b.a.

18:00 Discussion/Poster session

19:00 Dinner (Barbecue)

**Wednesday, June 28, 2017**

**Session 6: XCCA, Chair:**

9:00 *Peter Wochner (Max Planck Institute, Stuttgart, Germany)*

Title: t.b.a.

9:30 *Silvain Ravy (SOLEIL, France)*

Can we learn something from speckle statistics?.

10:00 *Ruslan Kurta (European XFEL, Germany)*

Finding order in disorder with focused coherent x-ray beams

10:30 Coffee break

**Workshop summary, Chair:**

11:00 – Discussions and conclusions

12:00 – Closing remarks, lunch and departure