

Timing Experiments at PETRA IV



Monday 27 March 2017 - Wednesday 29 March 2017

DESY Hamburg

Scientific Programme

Workshop Program

Location: DESY, Bldg.28c (FLASH SeminarRoom)

27 March 2017, Monday

13:00 Registration (Lobby of FLASH Seminarroom, Bldg. 28c)

Introduction, Chair: Ralf Röhlsberger

14:00 Christian Schroer (DESY Photon Science)

<div style="text-indent:44px;"> Science at PETRA III + IV: Conditions and Opportunities </div>

14:30 Ilya Agapov (DESY Accelerators)

<div style="text-indent:44px;"> Status of the PETRA IV Accelerator Studies </div>

15:00 Discussion

15:30 Coffee break

Timing Keynote Talks, Chair: Jens Viefhaus

16:00 Ercan Alp (Advanced Photon Source, Argonne National Lab, USA)

<div style="text-indent:44px;"> Timing and Bunch Pattern Requirements for Nuclear Resonant Scattering Experiments</div>

16:30 Christian Bressler (European XFEL, Hamburg)

<div style="text-indent:44px;"> Pump-probe experiments </div>

17:00 Gerd Schönhense (Universität Bielefeld)

<div style="text-indent:44px;"> k-Space Microscopy with ToF-Recording and Spin-Filtering </div>

<div style="text-indent:44px;"> – Towards the “Complete” Photoemission Experiment </div>

17:30 Discussion

19:00 Dinner at the DESY Bistro

28 March 2017, Tuesday

Timing for Nuclear Resonant Scattering, Chair: Ercan Alp

9:00 Tom Toellner (Advanced Photon Source, Argonne National Lab, USA)

<div style="text-indent:37px;">Fast Shutters for Nuclear Resonant Scattering </div>

9:30 Volker Schünemann (Universität Kaiserslautern)

<div style="text-indent:37px;"> Non-equilibrium lattice dynamics via NRS </div>

10:00 Jörg Evers (Max-Planck Institut für Kernphysik, Heidelberg)

<div style="text-indent:44px;"> Time-resolved nuclear quantum optics </div>

10:30 Coffee Break

Pump-Probe Experiments, Chair: Christian Bressler

11:00 Stefan Eisebitt (Max-Born Institut, Berlin)

<div style="text-indent:44px;"> Pump-Probe Holographic Imaging with X-rays </div>

11:30 Michael Rübhausen (Universität Hamburg)

<div style="text-indent:44px;"> Transferring the entatic state concept into photochemistry </div>

12:00 Simone Techert (DESY, Uni Göttingen)

<div style="text-indent:37px;"> Time-resolved RIXS </div>

12:30 Discussion

13:00 Lunch (DESY canteen)

14:30 Henry Chapman (DESY CFEL, Hamburg)

<div style="text-indent:44px;"> Serial crystallography at a low-emittance storage ring </div>

Contributed Talks

15:00 Tao Ye (Institute of High-Energy Physics, Beijing)

<div style="text-indent:44px;"> Timing experiments at current BSRF and future HEPS</div>

15:20 Roman Shayduk (DESY, Hamburg)

<div style="text-indent:44px;"> Applied pump-probe X-ray diffraction at synchrotrons</div>

15:40 Patrik Vagovic (DESY CFEL1)

<div style="text-indent:44px;"> Tracking of non-repetitive processes with full field </div>
<div style="text-indent:44px;"> hard X-ray MHz rate single bunch imaging </div>

16:00 Discussion

16:15 Coffee break

16:45 Peter Gaal (Universität Hamburg)
<div style="text-indent:44px;"> Spatio-temporal coherent control of lattice dynamcis </div>
<div style="text-indent:44px;"> for time-resolved x-ray diffraction </div>

17:05 Markus Weigand (MPI for Intelligent Systems, Stuttgart)
<div style="text-indent:44px;"> Time resolved Scanning X-ray Microcopy of Magnetic Nano Structures </div>

17:25 Robert Frömter (Universität Hamburg)
<div style="text-indent:44px;">X-ray holographic microscopy of magnetic nanostructures </div>
<div style="text-indent:44px;"> at 10 nm spatial resolution </div>

17:45 Discussion

18:00 Poster session

19:00 Dinner (Barbecue)

29 March 2017, Wednesday

Time-of-flight methods, Chair: Gerd Schönhense

9:00 Michael Meyer (European XFEL, Hamburg)

<div style="text-indent:37px;"> One and Two-Color Photoionization
Photoionization Dynamics </div>

9:30 Markus Schöffler (Universität Frankfurt)

<div style="text-indent:37px;"> Atoms and molecules under the reaction microscope </div>

10:00 Tim Salditt (Universität Göttingen)

<div style="text-indent:44px;"> Time resolved diffraction, phase contrast imaging and tomography
of soft and biological matter </div>

10:30 Coffee break

Workshop Summary, Chair: Jens Viefhaus

11:00 Reports of the discussion leaders

<div style="text-indent:44px;"> Discussion and conclusions </div>

12:30 Closing remarks, lunch and departure