

# International Workshop on Phase Retrieval and Coherent Scattering



## List of Posters

- P1 High-Resolution Ab Initio Three-Dimensional Coherent X-Ray Diffraction Microscopy: Status and Challenges**  
Barty A., Chapman H.N., Marchesini S., Howells M.R., Jacobsen C., Kirz J., Spence J.C.H., Shapiro D., Beetz T., Cui C., Weierstall U., He H.
- P2 Evolution of Co/Pt-Covered Nanolines under Magnetic Field using Coherent Soft X-Ray Resonant Magnetic Scattering**  
Beutier G., Livet F., Marty A., van der Laan G., Stanescu S., Chamard V., Baltz V.
- P3 XPCS and Self-Organization of Metal Surfaces**  
Boragno C., Batatier de Mongeot F., Valbusa U., Felici R.
- P4 The Phase of the Coherent Forward Scattering Amplitude as Revealed by Stroboscopic Detection of Nuclear Resonant Scattering of Synchrotron Radiation**  
Bottyán L., Deák L., Coussemant R., Nasu S., Yoda Y.
- P5 Fast APD Arrays and Highly Resolved X-Ray Beam-Position Monitoring for XPCS**  
Bunk O., Pfeiffer F., Donath X., Schulze-Briese C., Renker D., Schlumpf N.
- P6 Heterodyne X-Ray Speckles. A Novel Low-Angle Scattering Technique**  
Cerbino R., Peverini L., Potenza M.A.C., Giglio M.
- P7 Coherent X-Ray Diffraction for Phase Retrieval: Shape and Strain Reconstruction of a Single Microcrystal**  
Chamard V., Livet F., Bley F., de Boissieu M., Picca F., Ludwig K., Mocuta C., Metzger T.H., Robinson I.K.
- P8 Hard X-Ray Wave-Front Sensing with Moiré Interferometry**  
David C., Weitkamp T., Diaz A., Ziegler E.
- P9 Fabrication of Si and Au Microgratings for Hard X-Ray Interferometry**  
Diaz A., Rohbeck T., Bruder J., Grünzweig C., and David C.

- P10 Diffraction Imaging with Complex-Valued Electron Density Reconstruction**  
Dronyak R., Stetsko Yu. P., Tang M.-T., Liang K. S., Chen F.-R., Yen W.Y., Kai J.J.
- P11 Diffraction from Periodic Arrays of Oxide-Filled Trenches in Silicon: Investigation of Local Strains**  
Eberlein M., Escoubas S., Thomas O., Rohr P., Coppard R.
- P12 Dynamics of Fluctuations of Colloidal Particles under Shear Flow with XPCS**  
Fluerasu A., Madsen A.
- P13 Circular Surfactants Hemi-Micelles at the Air-Water Interface, a System for Coherent Diffraction Imaging ?**  
Fontaine P., Goldmann M., Muller P., Fauré M.-C., Konovalov O., Krafft M. P.
- P14 Waveguide-Based Hard X-Ray Holography**  
Fuhse C., Ollinger C., and Salditt T.
- P15 Waveguide-Based Hard X-Ray Holography**  
Fuhse C., Ollinger C., and Salditt T.
- P16 Phase Contrast Computed Tomography: A Different Approach**  
Groso A., Stampanoni M., Schneider P., Müller R., Abela R.
- P17 Characterization of the Diversion of Liquid Alkali Metals Structure on the Transition to Nonmetal**  
Ghatee M.H., Bahadori M., Sanchooli M.
- P18 Coherence Measurements using a Partial Talbot Effect**  
Guigay J.P., Zabler S., Cloetens P., David C., Mokso R., Schlenker M.
- P19 Can the Transport of Intensity Equation and the Transfer Function Approaches be Reconciled?**  
Guigay J.P., Yamanaka T., Cloetens P.
- P20 Phasing of X-Ray Diffraction from Objects with Complex Densities**  
Harder R., Liang M. Robinson I.K.
- P21 Modelling and Comparison of Phase-Retrieval Algorithms for Hard X-Ray Imaging**  
Helfen L., Jonas P., Cloetens P., Louis A.K., Baumbach T.
- P22 Phase Determination by Means of Three- and Four Photon Correlation Measurements**  
Howells M.R., Holton J. M., Frankel K.
- P23 Coherent X-Ray Diffraction Microscopy: Fundamental and Technical Limits**  
Howells M.R., Barty A., Chapman H.N., Cui C., Jacobsen C.J., Kirz J., E. Lima, Marchesini S., Miao H., Shapiro D.A., Spence J.C.H., Weierstall U.
- P24 Exit Wave Reconstruction in High-Resolution Electron Microscopy using the Transport of Intensity Equation**  
Ishizuka K. and Allman B.
- P25 Towards Community Software for Diffraction Imaging**  
Jacobsen C., Barty A., Chapman H., Elser V., Huang X., Lima E., Marchesini S., Miao H., Thibault P., Shapiro D.

- P26 Phase Retrieval Algorithm for Monotonically Changing System**  
Kim S.S., Marathe S., and Noh D.Y.
- P27 Dynamics of Block Copolymer Films by X-Ray Photon Correlation Spectroscopy**  
Rühm A., Lee H., Lee Y.J., Jiang Z., Jiao X., Lurio L.B., Sinha S.K., Mochrie S.G., Kim H.
- P28 Effect of Fresnel Illumination on Oversampling Iteration Method**  
Kohmura Y., Nishino Y., Ishikawa T. and Miao J.
- P29 X-Ray Tomographic Imaging of Crystal Structure at Atomic Level**  
Korecki P., Tolkiehn M., Novikov D.V., Materlik G., Szymonski M.
- P30 Exact Determination of the Phase in Time-Resolved X-Ray Reflectometry**  
Kozhevnikov I., Peverini L., Ziegler E.
- P31 Coherent X-Ray Diffraction and Charge Density Wave Dislocations**  
Le Bolloc'h D., Ravy S., Dumas J., Marcus J., Livet F., Detlefs C., Yakhou F. and Paolasini L.
- P32 A Method to Reconstruct the 3D Non-crystalline Sample from the X-Ray Diffraction Intensities Only**  
Lee T.K., Wang C.W. and Chen C.C.
- P33 Monolithic Fresnel Bi-Mirror for Hard X-Rays**  
Leitenberger W., Panzner T., Pietsch U.
- P34 Non-destructive Testing with Neutron Phase Contrast Imaging**  
Lorenz K., Lehmann E., Schillinger B.
- P35 Characterization of Nanometric Grain Boundary Wetting Layers by Different X-Ray Imaging Approaches**  
Ludwig W., Pereiro-Lopez E., Bellet D., Cloetens P.
- P36 A Unified Evaluation of Iterative Projection Algorithms**  
Marchesini S.
- P37 Direct Phasing by Fourier Transform X-Ray Holography**  
McNulty I., Paterson D.J., Xiao Y., and Fan L.
- P38 Application of ALICE Diffractometer for Coherent Resonant Soft X-Ray Scattering**  
Nefedov A., Grabis J., Hellwig O., Eisebitt S., Eberhardt W., Lüning J., Schlotter W., Stöhr J. and Zabel H
- P39 Two Dimensionally Confined Hard X-Ray Waveguides**  
Ollinger C., Fuhse C., Jarre A. and Salditt T.
- P40 Fresnel Diffraction at a Circular Aperture-Determine the Illumination Function for Coherent Reflectivity**  
Panzner T., Gleber G. and Pietsch U.
- P41 Characterization of Medium-Range Order in Noncrystalline Systems by Fluctuation X-Ray Microscopy**  
Paterson D., Fan L., McNulty I., Gibson J. M., Treacy M.M.J.

- P42 Practical Considerations for the Use of Structured Illumination in Coherent Diffractive Imaging**  
Peele A.G., Nugent K.A., Quiney H.M.
- P43 Coarsening Dynamics in Elastically Anisotropic Phase-Separating Alloys with XPCS**  
Pfau B., Stadler L.-M., Sepiol B., Weinkamer R., Zontone F., and Vogl G.
- P44 Shearing Interferometer for Quantifying the Coherence of Hard X-Ray Beams**  
Pfeiffer F., Bunk O., Schulze-Briese C., Diaz A., Weitkamp T., David C., van der Veen J.F., Vartanyants I., Robinson I.K.
- P45 cSAXS – The New Coherent Small Angle X-Ray Scattering Beamline at the Swiss Light Source**  
Pfeiffer F., Bunk O., Donath X., Broennimann C., Chen Q., Schmidt T., Ingold G.
- P46 Coherent Diffractive Imaging Algorithms: New Points of View**  
Quiney H. M., Nugent K.A. and Peele A.G.
- P47 Displacive Transition Revisited by Coherent X-Ray Diffraction**  
Ravy S., Le Bolloc'h D., Currat R., Fluerasu A., Moussaïd A. and Madsen A.
- P48 Computational Simulations and Characterization of a CCD-Detector in Preparation of an Experiment with Coherent X-Rays**  
Schropp A., Schroer C., Vartaniants I.A., Weckert E.
- P49 Coherent X-Ray Diffraction Imaging of Biological Specimens**  
Song C., Nishino Y., Kohmura Y., Ishikawa T., Paterson D., McNulty I., Bentolila L., Graham L., Glimcher M.J., Kato-Stankiewicz J., Tamanoi F., and Miao J.
- P50 Sector 8: A Dedicated Undulator Beamline for Performing XPCS and GISAXS Studies**  
Sprung M., Sandy A.R., Narayanan S., Li X., Wang J., Jiao X., Lurio L.B. and Mochrie S.G.J.
- P51 XTM – Beamline at the SLS: A Novel Facility for X-Ray Tomographic Microscopy and Real Time Coherent Radiology**  
Stampanoni M., Groso A., Abela R., Chen Q., Isenegger A., Maden D., Lange M., Meister D.
- P52 Probing Surface Dynamics of Poly-Propyleneglycol near the Glass Transition by 2D-XPCS**  
Sternemann H., Madsen A., Seydel T., Streit S., Paulus M., Sprung M., Gutt C., Tolan M.
- P53 Investigation of the Dynamics of Colloidal Thin Films at the Nanometer Scale with Surface XPCS**  
Streit S., Sternemann H., Chamard V., Sprung M., Gutt C., Madsen A., Tolan M.
- P54 Phase Retrieval and Tomographic Reconstruction of the Refractive Index Distribution from Diffraction Enhanced Imaging**  
Strobl M., Treimer W., Hilger A.
- P55 One-Dimensional Phase Problem of High-Resolution Fourier Transform X-Ray Spectroscopy**  
Tamasaku K., Yabashi M., Ishikawa T.
- P56 Imaging of a Yeast Cell by Diffraction Microscopy: The Algorithmic Part**  
Thibault P., Elser V.

- P57 Complete Wavefield Recovery using Phase-Space Tomography and Its Applications in X-Ray Imaging**  
Tran C.Q., Peele A.G., Mancuso A., Dhal B.B., Paterson D., Cai Z., Lai B., McNulty I., Roberts A. and Nugent K.A.
- P58 Ultra Small Angle Scattering vs Refraction - A Phase Based Problem**  
Treimer W., Strobl M., Hilger A.
- P59 Precise Estimation of Atom Positions from the Phase of a Reconstructed Electron Exit Wave**  
Van Aert S., Bals S., Van Dyck D., Van Tendeloo G. and Ávila-Brande D.
- P60 Combined Analyser-Based and Propagation-Based Phase-Contrast Imaging of Weak Objects**  
Nesterets Ya.I., Gureyev T.E., Pavlov K.M., Paganin D.M. and Wilkins S.W.
- P61 Imaging Nanocrystals with Curved Beam Diffraction**  
Williams G.J., Quiney H.M., Peele A.G., Nugent K.A.
- P62 Phase Sensitive Imaging with X-Rays and Neutrons - Parallels and Differences -**  
Zabler S., Kardjilov N., Banhart J., Lee S. W., Sim C. M.
- P63 Optimisation of Phase Imaging with Hard X-Rays**  
Zabler S., Cloetens P., Guigay J.-P., Baruchel J., M. Schlenker
- P64 Hard-Sphere Colloids in the Fluid Phase Probed by X-Ray Photon Correlation Spectroscopy**  
Zontone F., Moussaïd A., Grübel G. and Robert A.