



15th Biennial Conference
on High Resolution X-Ray Diffraction and Imaging

XTOP 2024

17th – 22nd March 2024
Carry-le-Rouet, France

Second announcement

We are happy to announce that the 15th XTOP Biennial Conference of High Resolution X-ray Diffraction and Imaging - will be held in Carry le Rouet, close to Marseille. The first XTOP conference took place in Marseille in 1992. The main scope of the conference was set already in 1992 to X-ray topography and high resolution diffraction, however during the time the conference has covered also other related topics like x-ray tomography, phase sensitive scattering, scanning techniques etc.

XTOP brings together scientists from the fields of X-ray diffractometry, reflectometry, standing waves, coherent and conventional X-ray diffraction imaging and topography, as well as X-ray absorption and phase contrast imaging. XTOP is thus one of the central scientific conference concerning methods and instrumentation in laboratory and synchrotron-based high-resolution X-ray diffraction methods, phase contrast imaging, and micro-tomography.

Dates

- 17th to 22nd of March 2024

Location

- [Miléade Village Club, Carry Le Rouet \(close to Marseille, France\).](#)

Important dates

- **Opening date for the submission of abstracts:** 01/10/2023.
- **Deadline for submission of abstracts:** 10/11/2023.
- **Opening of the registration:** beginning of November 2023.
- **Answer to authors:** 1st December 2023.
- **Early bird registration deadline:** 15/12/2023.
- **Deadline for late registration:** February 2024.

Website and contact information

- **Website of the conference:** <https://xtop2024.sciencesconf.org/>
- **Contact:** xtop2024@im2np.fr

The local organizing committee is looking forward to welcoming you in Carry le Rouet!

Sessions and confirmed invited speakers

- **Imaging** (full field and scanning microscopy; phase contrast imaging; coherent diffraction imaging; high resolution diffraction imaging, topography): [Ana Diaz, PSI \(Switzerland\)](#).
- **Probing matter with coherent X-rays:** [Claire Donnelly, MPI Dresden \(Germany\)](#).
- **Theory:** Crystal theory versus experiments, high throughput computing, phase retrieval, statistical approaches, deep learning, AI: [Vincent Favre-Nicolin, ESRF \(France/Europe\)](#).
- **Crystal defects:** theory vs experiment: [Andrej Singer, Cornell University \(USA\)](#).
- **Strain and stress analysis:** [Can Yildirim, ESRF \(France/Europe\)](#).
- **Industrial applications with X-ray scattering:** [Ehrenfried Zschech, DeepXscan \(Germany\)](#).
- **In situ & operando experiments:** [Hyunjung Kim, Sogang University \(Korea\)](#).
- **SAXS, reflectivity, grazing incidence scattering:** [Stefano Toso, IIT Genova \(Italy\)](#).
- **XFEL and new sources:** [Gema Martinez-Criado, ESRF \(France/Europe\)](#).

Tutorials (first day of the conference: Monday the 18th of March)

- Basic concepts of X-ray scattering and prospects: [Ian Robinson](#), Brookhaven National Laboratory (USA).
- Bragg Coherent Diffraction Imaging and its applications: [Marie-Ingrid Richard](#), CEA IRIG Grenoble, (France).
- X-ray ptychography and its applications, [Virginie Chamard](#), CNRS, Institut Fresnel, France.
- X-ray surface scattering and its applications, [Frank Schreiber](#), University of Tuebingen, (Germany).
- Laue microdiffraction, [Jean-Sébastien Micha](#), CNRS, ESRF (France/Europe).

Historical conferences

- History of the XTOP conference: [José Baruchel](#), Emeritus Scientist at ESRF (France/Europe).
- Conference in the honour of Prof André Authier: [Michèle Sauvage](#), Emeritus CNRS research director, Synchrotron SOLEIL (France) & [Cécile Malgrange](#), Emeritus professor Sorbonne University (France).

Scientific committee

Prof. T. Baumbach, KIT, Karlsruhe, Germany
Dr. G. Carbone, MAX IV, Lund, Sweden
Prof. I. Feranchuk, Belarusian State University, Minsk, Belarus
Dr. C. Giannini, Institute of Crystallography, Bari, Italy
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Prof. A. Korsunsky, University of Oxford, UK
Prof. M. Leoni, Trento University, Trento, Italy
Prof. S. Maksimenko, Institute of Nuclear Problems, Minsk, Belarus
Dr. N. Mangelinck-Noël, CNRS IM2NP, Marseille, France
Prof. R. Matyi, Florida Polytechnical University, USA
Prof. P. Mikulík, Masaryk University, Brno, Czech Republic
Prof. U. Pietsch, Universität Siegen, Siegen, Germany
Prof. I. Robinson, Brookhaven National Laboratory, Upton, USA
Prof. A. Snigirev, Baltic Federal University, Kaliningrad, Russia
Prof. J. Stangl, University of Linz, Austria
Prof. B. Tanner, Durham University, Durham, UK
Prof. O. Thomas, Aix-Marseille Université, Marseille, France
Prof. A. Ulyanenko, Atomicus, Seattle, USA
Dr. I. A. Vartaniants, DESY, Hamburg, Germany

Local organisation committee

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Fabien Cheynis (CINaM)
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