

Preliminary Programme

Monday, October 5th, 2026

From LURE to the 4th Synchrotron Radiation facility History and driving concepts

13:30 - 14:00 *Registration*

14:00 - 14:15 Welcome
Valérie Briois, Delphine Vantelon - Synchrotron SOLEIL, France

14:15 - 14:50 TBD
Pierre Lagarde, Denis Raoux

14:50 - 15:25 XAFS de surface et XAFS dispersif ; l'usage essentiel de la polarisation du photon dans le champ naissant des interfaces et multicouches
Dominique Chandesris, Alain Fontaine

15:25 - 15:42 TBD
Christian Brouder

15:42 - 16:00 TBD
Georges Calas

16:00 - 16:30 *Coffee Break*

16:30 - 17:05 La spectroscopie d'absorption sous pression : une spécialité française, du LURE à SOLEIL en passant par l'ESRF et SLS
Jean-Paul Itié, Alain Polian

17:05 - 17:40 Chemistry & XAFS@LURE at the edge of the 80s, Science, People, Driving Concepts
Christophe Cartier Dit Moulin, Michel Verdaguer, Françoise Villain



The Journey of XAFS beamlines from the 1st to the 4th generation of
17 :40 – 18 :15 Synchrotron Radiation Facilities
Jean Daillant, Michèle Sauvage

Tuesday, October 6th, 2026

XAFS contribution to the past and today science

09:00 – 09:05 Introduction

XAFS Theory: 50 Years of Breakthroughs
09:05 - 10:00 **John Rehr** - Department of Physics. University of Washington, United States

Invited talk : Title TBD
10:00 - 10:35 **Stéphanie Rossano** - Laboratoire Géomatériaux et Environnement, Université Gustave Eiffel, France

10:35 – 11 :00 Coffee Break

X-ray Spectroscopy at the European X-ray Free Electron Laser
11:00 - 11:35 **Sakura Pascarelli** - European XFEL, Germany

First-principles XANES calculations within the pseudopotential framework: 17 years of XSpectra
11:35 – 11 :53 **Delphine Cabaret** - Sorbonne Université, IMPMC, France

XAFS in liquids and disordered systems: early and recent advances from LURE times to today
11 :53 – 12 :11 **Andrea Di Cicco** - Università di Camerino, Italy

12:11 – 12 :29 Oral Communications TBD

12:30 - 14:00 Lunch

Parallel sessions – 2 different rooms

- 14:00 - 15:30
- Disordered Materials & Cultural Heritage - *Amphitheatre*
 - Catalysis - *Reception Building Amphitheatre*

15:30 – 15:55 *Coffee Break*

15:55 – 16:30 Evolution of Synchrotron XAS for Heterogeneous Catalysis : From early studies to operando strategies and data analysis, at IFPEN
Christèle Legens - *IFP Energies Nouvelles, France*

16:30 - 17:20 Exhibitors presentations

17:20 - 18:30 Poster session

18:30 Conference diner at La Coupole

Wednesday, October 7th, 2026**Theory and Data Analysis
Technique Evolutions**

09:00 – 09:05 Introduction

09:05 - 10:00 Simulating X-ray Absorption Spectroscopies Can Be Useful
Yves Joly - *Institut Néel. Université Grenoble Alpes, France*

10:00 - 10:35 Invited talk : Title TBD
Jean Susini – *Synchrotron SOLEIL, France*

10:35 - 11:00 *Coffee Break*

11:00 - 12:30 **Parallel sessions – 2 different rooms**

- Energy Related Materials – *Amphitheatre*
- Geosciences Part I - *Reception Building Amphitheatre*

12:30 - 14:00 *Lunch*

14:00 - 14:35 X-ray Absorption Spectroscopy: A Key to Deciphering and Optimizing
Battery Materials
Laurence Croguennec – *ICMCB, France*

14:35 - 14:53 Understanding chemical bonds with valence RIXS
Oana Bunau – *ESRF, France*

14 :53 – 15 :11 Orbital Engineering in Graphene/SiC: An ELNES and FDMNES Study
Vinod Kumar Paidi - *CNRS, INSA Lyon, UCBL, MATEIS, UMR 5510, France*

15 :11 – 15 :29 Unraveling Local Environment in Multicomponent Materials using
Reverse Monte Carlo Simulations
Alexei Kuzmin - *Institute of Solid State Physics, Latvia*

15 :29 – 15 :47 Multiple-Edge EXAFS/RMC Refinement for 3D Local Structure in
SrTiO₃
Andris Anspoks - *Institute of Solid State Physics, Latvia*

15:50 - 16:10 *Coffee Break*

16:10 - 16:45 Dichroisms at LURE and SOLEIL
Philippe Saintavit - *Institut de Minéralogie, de Physique des Matériaux et de Cosmochimie. Sorbonne Université, France*

16:45 - 17:03 Introducing « FITNESS »: a new program, built-in to Fastosh, to
efficiently perform shell-by-shell fitting of the EXAFS
Gautier Landrot – *Synchrotron SOLEIL, France*

- 17:03 - 17:21 From Monometallic to Bimetallic NiCo/SiO₂: Element-Resolved Active-Site Identification by Operando XAS and MCR-ALS
Shuchi Zhang - Eindhoven University of Technology, Netherlands
- 17:21 - 17:39 Resolving the "Coloring Problem" in Crystallography: The Synergistic Power of EXAFS and Resonant Diffraction
Carmelo Prestipino - CRISMAT, France
- 17:39 - 17:57 EXAFS Unbound: Unlocking Atomic Scale Insights Beyond The Next Edge
Rene Bes - University of Helsinki, Finland
- 17:57 - 18:30 Hommage à Alain Michalowicz
Karine Provost - Institut de Chimie et des Matériaux Paris-Est. Université Paris Est Créteil, France
- 18:30 - 20:00 Poster session and Aperitif

Thursday, October 8th, 2026

Technique Evolutions 4th generation and beyond

- 09:00 - 09:05 Introduction
- 09:05 - 10:00 Plenary lecture : Title TBC
Janis Timoshenko - Fritz Haber Institute. Max-Planck-Gesellschaft, Germany
- 10:00 - 10:35 Invited talk : Title TBD
Philippe Martin - CEA Marcoule, DES/ISEC/DMRC, France
- 10:35 - 11:00 Coffee Break

Parallel sessions – 2 different rooms

11:00 - 12:30

- Chemistry – *Amphitheatre*
- Geosciences Part II - *Reception Building Amphitheatre*

12:30 - 14:00

Lunch

Invited talk : Title TBC

14:00 - 14:35

Geraldine Sarret - *Institut des Sciences de la Terre. Université Grenoble Alpes, France*

14:35 - 14:53

Beyond XAS with RIXS

Jean-Pascal Rueff – *Synchrotron SOLEIL, France*

14:53 - 15:11

Study of the genesis of HDS catalysts by in situ photon in photon out spectroscopy

Sylvain Cristol - *Université de Lille, France*

15:11 – 15:29

Understand 4f covalency by ab initio calculated RIXS plane

Sihan Zhang - *ESRF, France*

15:29 – 15:47

Tender X-ray photon-in/photon-out spectroscopy at ESRF ID26

Pieter Glatzel - *ESRF, France*

15:50 - 16:10

Coffee break

16:10 - 16:45

Invited talk : Title TBC

Laurent Michot - *Laboratoire de physicochimie des électrolytes et nanosystèmes interfaciaux. Sorbonne Université, France*

16:45 – 17:03

Developments of the setup for pump-probe X-ray absorption fine structure (XAFS) and a capability of EXAFS at FXE instrument, European XFEL

Yohei Uemura - *European XFEL, Germany*

- 17 :03 – 17 :21 X-ray Absorption Spectroscopy and Diamond
Giannantonio Cibin - *Diamond Light Source, United Kingdom*
- 17 :21 – 17 :39 Operando Spatio-Temporal Study of CO oxidation reaction in Pd
Catalysts using Full-Field Hyperspectral XAS imaging
Marlon Muniz Da Silva – *CNPEM, Sirius, Brazil*
- 17 :39 – 17 :57 X-ray Absorption Spectroscopy meets Imaging to Unveil Inclusion
Puzzles in Deep Diamonds
Helio Tolentino - *LNLS/CNPEM, Brazil*
- 18 :00 Conclusion & Goodbyes

Friday, October 9th, 2026

Fastosh & FDMNES Tutorials

Programme to be determined

Parallel Session Schedule

Tuesday, October 6th, 2026

Disordered Materials & Cultural Heritage

Amphitheatre

- 14:00 – 14:18 Local Structure in Silicate Glasses and Melts at Extreme Conditions
Max Wilke - *Universität Potsdam, Germany*
- 14:18 - 14:36 From liquid to solid: The contribution of XANES at the structure and
properties of glasses and melts
Daniel Neuville - *IPGP CNRS, France*

- 14:36 - 14:54 X-RAY ABSORPTION SPECTROSCOPY IN SURFACE SCIENCE ON LUCIA
Nicolas Trcera – Synchrotron SOLEIL, France
- 14:54 - 15:12 XAFS to study Cultural Heritage Metallic Materials
Solenn Reguer – Synchrotron SOLEIL, France
- 15:12 – 15:30 Harnessing X-rays to Reveal Historical Productions in Late Iron Age Britain
Susan Nehzati - Diamond Light Source, United Kingdom

Catalysis

Reception Building Amphitheatre

- 14:00 – 14:18 Catalyst Design Guided by XAS Spectroscopy
Xavier Carrier - Sorbonne Université, France
- 14:18 - 14:36 XAS's contribution to IRC(IRCELYON) research in the field of catalysis
Christophe Geantet - CNRS, France
- 14:36 - 14:54 Operando XAFS Reveals Interfacial Redox Chemistry of Supported Metal Catalysts as the Switch Descriptor Between Base- and Tip-Growth Carbon Filaments During Catalytic Methane Splitting
Wilson Henao – Instituto de Tecnología Química (ITQ), Spain
- 14:54 - 15:12 Combined XAFS/DRIFTS/MS : a powerful technique for operando catalysts investigations
Davide Salusso – ESRF, France
- 15:12 – 15:30 Monitoring the Formation of a Single-Atom Catalyst with Operando Quick XAFS
Laurent Piccolo - IRCELYON, France



Wednesday, October 7th, 2026

Energy Related Materials

Amphitheatre

- 11:00 – 11:18 From Ex Situ to Operando Soft X-rays Microscopy of Photoactive Materials: Case of Hematite-based Photoanodes
Stefan Stanescu – *Synchrotron SOLEIL, France*
- 11:18 - 11:36 Operando XAS Strategies for Rational Design of Electrochemical Energy Materials
Francesco Paparoni - *Synchrotron SOLEIL, France*
- 11:36 - 11:54 Tuning Redox Chemistry in Gd-Doped Ceria: Gd-Driven Suppression of Ce³⁺ Formation in Reducing Condition
Alessandro Longo – *ESRF, France*
- 11:54 - 12:12 The Optical Dispersive EXAFS (ODE) Beamline at Soleil Synchrotron and Its Studies
Qingyu Kong – *Synchrotron SOLEIL, France*
- 12:12 – 12:30 Combined Operando XRD And XAS Study Of Electrochemically Active Li₂MChO Anti-perovskites
Mikhail Gorbunov - *Karlsruhe Institute of Technology, Germany*

Geosciences Part I

Reception Building Amphitheatre

- 11:00 – 11:18 Coupling High-Energy Resolution Fluorescence Detected X-ray Absorption Spectroscopy (HERFD-XAS) with microfluidic cells for in situ monitoring of tungsten nanoparticles redox transformation
Melanie Auffan – *CEREGE CNRS, France*
- 11:18 - 11:36 Vanadium enrichment in lateritic soils: mineralogical and pedoclimatic controls
Myriam Boudieb – *Sorbonne Université, France*

- 11:36 - 11:54 Redox speciation of cerium in the presence of colloids
Terjini Kiththangodage – *IPGP, France*
- 11:54 - 12:12 XAS Studies Of Metal Transport In Hydrothermal Fluids : Autoclaves
And Photons
Denis Testemale – *Institut Néel, CNRS, France*
- 12:12 – 12:30 Probing the Speciation of Transition Metals (Mo, W) in Hydrothermal
Fluids by In-Situ XAS
Maria Kokh - *Institut für Geowissenschaften Universität Potsdam,
Germany*

Thursday, October 8th, 2026Chemistry
Amphitheatre

- 11:00 – 11:18 Unraveling the fate of anticancer gold complexes in cells through
HERFD-XAFS
Tom Lacoma – *Sorbonne Université, France*
- 11:18 - 11:36 Comparative Pt L₃-edge XAS study of Pt nanoparticles with different
morphologies in solution and tumor cells
Raul Magro Hernandez – *UCM, Spain*
- 11:36 - 11:54 Magnetic hyperthermia at the nanoscale
Jerome Fresnais – *CNRS, Laboratoire PHENIX, France*
- 11:54 - 12:12 Understanding Nanoparticles Formation mechanisms at ITODYS
Laboratory: Insights from investigations at ROCK Beamline
Marion Giraud – *ITODYS, Université Paris Cité, France*
- 12:12 – 12:30 Time- and Space-Resolved Formation Stannosilicates by in situ XAS
Aram Bugaev - *Paul Scherrer Institute, Switzerland*

Geosciences Part II

Reception Building Amphitheatre

- | | |
|---------------|---|
| 11:00 – 11:18 | Redox speciation of contaminants at magnetite surface
Rémi Marsac – <i>Institut de physique du globe de Paris, CNRS, France</i> |
| 11:18 - 11:36 | Mineralogical Controls on the Fate of Emerging Contaminants in
Laterites Revealed by XAFS
Quentin Bollaert – <i>Synchrotron SOLEIL, France</i> |
| 11:36 - 11:54 | Thermal transformation of clay minerals probed by in situ soft-X-ray
absorption spectroscopy
Erwan Paineau – <i>Laboratoire de Physique des Solides, CNRS,
France</i> |
| 11:54 - 12:12 | Assessing the Sensitivity of X-ray Absorption Spectroscopy to
Distinguish Various Forms of Nucleic Acids and Their Surface
Structures on Imogolite Nanotubes
Jerome Rose – <i>CNRS CEREGE, France</i> |
| 12:12 – 12:30 | A short retrospective of actinide hexacyanoferrate exploration
initiated at LURE
Christophe Den Auwer - <i>Université Côte d'Azur, France</i> |