

New opportunities in the Earth Sciences at the Extremely Brilliant Source of the ESRF

Atelier Spectroscopie de l'OSUG

The European Synchrotron Radiation Facility (ESRF, Grenoble) will undergo an upgrade of its machine starting at the end of 2018 (phase II of the [ESRF Upgrade Programme](#)). This will result in a new generation of synchrotron, the *Extremely Brilliant Source* that will provide a more brilliant and more coherent X-ray beam. This upgrade, together with the advances in instrumentation and beamline upgrades, will open the door to new applications of X-ray techniques for the Earth Sciences. In particular, experiments with coherent X-ray beams are opening new research opportunities that remain little explored by the Earth Sciences community.

To be ready for the new scientific opportunities that will be offered by the EBS, this one-day symposium aims at bringing together the OSUG scientific community with ESRF experts on coherent X-ray techniques and with scientists from upgraded beamlines already used by OSUG scientists.

We invite you to take part on this symposium. A poster session will take place during the buffet that will serve as an opportunity to discuss specific scientific cases with ESRF experts.

**Nov 28th, from 8h30 to 14h00, at the Lliboutry Salle, IGE – ex LGGE
54 rue Molières, 38400 Saint Martin d'Hères**

Programme

08.30 - Accueil café

09.00 - Frederic Livet (SIMAP) – “The progress in dynamical studies by X-ray coherent scattering: example of critical fluctuations”

09.30 - Julio Cezar da Silva (ID16 ESRF) – “Quantitative X-ray ptychographic imaging: present and future innovations”

10.00 - Federico Zontone (ID10 ESRF) - "Perspectives for 3D Coherent X-ray Diffraction Imaging at the ESRF EBS"

10.30 - Beatrice Ruta (CNRS & ID10 ESRF) - "Using coherent X-rays to probe dynamical properties of materials at the ESRF-EBS"

11.00 - Pause café

11.20 - Hiram Castillo (ID21 ESRF) – “The ID21 beamline at ESRF: Sub-micron spectroscopy under cryogenic conditions for life and environmental sciences”

11.40 - Mauro Rovezzi (BM30 ESRF) – “The national X-ray absorption spectrometers FAME and FAME-UHD after the ESRF EBS phase”

12.00 - Jean Sebastien Micha (BM32, ESRF) – “Scientific possibilities and perspectives at the CRG-IF BM32 beamline of the ESRF”

12.20 - Jon Wright (ID11, ESRF) – “Diffraction based imaging at the Materials Science Beamline”

12.40 - Buffet & Posters

A buffet is offered at the end of the half day to continue the discussion during the lunch break. Please fill in this form [doodle](#) which will allow us to evaluate the number of participants and to size the buffet.

A visit to ESRF beamlines will be organized on another day. Information coming soon

The organisers,
Alejandro Fernandez-Martinez , Geraldine Sarret, Laurent Truche, Roberto Grilli, Valerie Magnin

