



ESRF Student Day - Monday, October 18, 2021

- 09:30 - 09:40 Welcome and Opening Remarks *Harald Reichert*
- 09:40 - 10:40 Oral Session** *chaired by Francesco Sette*
ESRF Auditorium (limited capacity) and Online (zoom)
<https://esrf.zoom.us/j/95300163791?pwd=eU1XcCtaNOZPRG9QbzV1Y0x1R2FFdz09>
- 09:40 - 10:00 Investigating the bassanite-gypsum transition combining diffraction tomography techniques
Michela La Bella
- 10:00 - 10:20 Staggered undulator X-ray source for low emittance electron storage ring
Ilija Asparuhov
- 10:20 - 10:40 Study of magnetically ordered rare-earth based MAX phases
Maxime Barbier
- 10:40 - 11:00 Break**
- 11:00 - 12:00 Poster Clip Session** (2 minutes, 2 slides per poster) *chaired Annalisa Pastore*
Online (zoom)
<https://esrf.zoom.us/j/95726126668?pwd=cGVqRW9vRFVuYXhjdVppUVlpblI1dz09>
- Poster 1** - Understanding how green additives control crystallization at the nanoscale
Annet Baken
- Poster 2** - Unveiling the properties of Warm Dense Matter for energy generation by fusion
Sofia Balugani
- Poster 3** - Optimization of antimicrobial longevity in polymer-surfactant coatings
Egor Bersenev
- Poster 4** - Studies of membrane proteins using pressurised noble gases
Sergei Bukhdruker
- Poster 5** - Historical and industrial paints under synchrotron light
Ida Fazlic
- Poster 6** - How high-speed synchrotron X-ray imaging can help us better understand Li-ion battery degradation and failure
Matilda Fransson

Poster 7 - Damage evolution during thermo-mechanical processing of thick aerospace aluminium plates

Anthony Harrup

Poster 8 - From operando X-ray imaging of lubricant/steel boundary layers to the reduction of CO₂ emission

Inga Kicior

Poster 9 - Characterization of plastic strain localization in polycrystalline Ni by means of 3D X-ray diffraction imaging techniques

Zheheng Liu

Poster 10 - X-ray ghost imaging

Mathieu Manni

Poster 11 - Monitoring sulphur poisoning of Cu-CHA deNO_x catalysts by X-ray absorption spectroscopy

Anastasia Molokova

Poster 12 - Advanced diffraction method for characterization of Li-ion battery materials

Isabella Mombrini

Poster 13 - Structural basis of melanogenesis enzymes

Yi Min Ng

Poster 14 - Emergence of Kondo physics in the surface region of CeCo₂P₂

Georg Poelchen

Poster 15 - Optimized heat transfer for X-ray optical components designed for high vibration stability

Alicia Potgieter

Poster 16 - Exploiting Serial crystallography in structure-based drug design

Mahmoud Rizk

Poster 17 - Operando stability investigation of ORR electrocatalysts

Michal Ronovsky

Poster 18 - Performing Energy Dispersive Laue Diffraction (EDLD) by means of X-rays Color Camera Microscope (XCCM)

Charbel Sakr

Poster 19 - Uncovering novel drug targets of polyprotein precursors of SARS-CoV2

Gian Luca von Scholley

Poster 20 - In situ spectroscopy of emission control catalysts with tender X rays

Alexander Suarez

Poster 21 - Nanoimaging of solid solution domains during phase transitions inside LiMn_{1.5}Ni_{0.5}O₄ cathode material

Nikita Vostrov

Poster 22 - Developing scintillators with high stopping power for X-ray imaging applications at synchrotrons

Laura Wollesen

Poster 23 - Anisotropic effects in stress-deformed rubbers observed by Small-Angle X-Ray Scattering

Ilya Yakovlev

Poster 24 - XRD and XAS investigation of cobalt-based Fischer-Tropsch synthesis catalysts

Lipeng Yao

Poster 25 - Catalytic dehydrogenation in LOHC technology

Olvido Irrazabal Moreda

12:00 - 14:00 *Lunch Break*

14:00 - 14:45 **Poster Session 1**

chaired by Montserrat Soler-Lopez

Online (zoom breakout rooms)

<https://esrf.zoom.us/j/93180177608?pwd=aDFCMTRZUEcwUDJPY1ZxMFVrUGpKQT09>

Posters 1 to 12

14:45 - 15:00 *Break*

15:00 - 15:45 **Poster Session 2**

chaired by Patrick Bruno

Online (zoom breakout rooms)

<https://esrf.zoom.us/j/94704784388?pwd=WHdHekNhZDJIQWxmVG1MTTg0YVJ5QT09>

Posters 13 to 25

15:45 - 16:00 **Closing Remarks**

Gordon Leonard

Online (zoom) same link as Poster Session 2

<https://esrf.zoom.us/j/94704784388?pwd=WHdHekNhZDJIQWxmVG1MTTg0YVJ5QT09>

Organizing Committee: Patrick Bruno, Montserrat Soler-Lopez, Laura Wollesen, Michela La Bella, Michal Ronovsky, Mattia Colalongo, Eva Jahn, Claudine Roméro, Eleanor Ryan