

# European Young Crystallographers – Satellite Meeting

## Program

Monday, 25th August 2025

|               |                 |                                                                                                                                                                                                    |
|---------------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9:00 – 9:05   | Opening remarks |                                                                                                                                                                                                    |
| Session 1     |                 | Chair: Emanuele Priola                                                                                                                                                                             |
| 9:05 – 9:20   | [O1]            | <b>Mattia Lopresti</b><br><i>Structural and optoelectronic characterization of lead-halide perovskites incorporating sulfonium cations</i>                                                         |
| 9:20 – 9:35   | [O2]            | <b>Michał Fabiański</b><br><i>Structural characterization of NaDCC solvates with glymes and crown ethers for the design of next-generation solid polymer electrolytes</i>                          |
| 9:35 – 9:50   | [O3]            | <b>Théodore Arnaud</b><br><i>Bacterial toxin interaction with human glycolipid: Structure of Pseudomonas aeruginosa lectin LecA/galactose complex using neutron macromolecular crystallography</i> |
| 9:50 – 10:05  | [O4]            | <b>Elizabeth R. Arnold</b><br><i>Local distortions and orbital disorder in ultra-high A-site variance perovskite <math>Ce_{0.5}Ba_{0.5}MnO_3</math></i>                                            |
| 10:05 – 10:20 | [O5]            | <b>Benjamin Marinus Darwin Fahl</b><br><i>Investigating trimer on dynamics and lattice instabilities in Magnetite</i>                                                                              |
| 10:20 – 10:55 | ☕ Coffee break  |                                                                                                                                                                                                    |
| Session 2     |                 | Chair: Stefano Canossa                                                                                                                                                                             |
| 10:55 – 11:10 | [O6]            | <b>Peter Smyth</b><br><i>High-throughput fixed target SFX for pharmaceutical screening at the European XFEL</i>                                                                                    |
| 11:10 – 11:25 | [O7]            | <b>Banaz Fetah</b><br><i>Discovery of a new high-pressure phase of Posaconazole</i>                                                                                                                |
| 11:25 – 11:40 | [O8]            | <b>Urban Leitgeb</b><br><i>N-glycosylation-driven dimerization: finding the sweet spot in myeloperoxidase biosynthesis</i>                                                                         |
| 11:40 – 11:55 | [O9]            | <b>Natasza Jakubik</b><br><i>Cocrystals of tricyclic antidepressant with cucurbiturils</i>                                                                                                         |
| 11:55 – 12:00 | [F1]            | <b>Milica Bogdanović</b><br><i>Quantum Chemical Study of Intermolecular Interactions in Muricatacin Polymorphs</i>                                                                                 |
| 12:00 – 12:05 | [F2]            | <b>Daniel M. Tchoń</b><br><i>Generalizing Instamatic data collection framework for electron crystallography</i>                                                                                    |
| 12:05 – 12:10 | [F3]            | <b>Swati Aggarwal</b><br><i>Structural biology with Neutron Macromolecular Diffractometer at ESS</i>                                                                                               |
| 12:10 – 12:15 | [F4]            | <b>Filippo Ballerini</b><br><i>Beyond Static Profiles: Stretched NMF for Phase-Resolved Analysis of MOFs via Variable-Temperature and Pressure PXRD</i>                                            |

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| 12:15 – 13:15                                                                       |  <b>Poster session</b>                                                                                                                  |
| 13:15 – 14:15                                                                       |  <b>Lunch break</b>                                                                                                                     |
| <b>Session 3</b> <span style="float: right;"><b>Chair: Helena Butkiewicz</b></span> |                                                                                                                                                                                                                          |
| 14:15 – 14:30                                                                       | <b>[O10]</b> <b>Adrian Kowaliński</b><br><i>Rare-earth MCAs: Synthesis and surrogate studies for actinide immobilization in oxide nanomaterials</i>                                                                      |
| 14:30 – 14:45                                                                       | <b>[O11]</b> <b>Somnath Dey</b><br><i>Non trivial disorder–modulated phase transitions in p-terphenyl and p-quarterphenyl crystals</i>                                                                                   |
| 14:45 – 15:00                                                                       | <b>[O12]</b> <b>Calum S. Sangster</b><br><i>3-Dimensional Electron Diffraction and In Situ Activation of Metal Organic Frameworks</i>                                                                                    |
| 15:00 – 15:15                                                                       | <b>[O13]</b> <b>Margaret Klureza</b><br><i>Implementing electric field-stimulated X-ray crystallography at EMBL P14 T-REXX using Hadamard time-resolved X-ray crystallography</i>                                        |
| 15:15 – 15:30                                                                       | <b>[O14]</b> <b>Jaskaran Mangat</b><br><i>Hidden broken symmetries and magnetic behaviour of the nickelate series <math>Pr_{2-x}Ca_xNiO_{4+\delta}</math> (<math>\delta \gg 0</math>, <math>\delta \approx 0</math>)</i> |
| 15:30 – 15:45                                                                       | <b>[O15]</b> <b>Aleksandra Zwolenik</b><br><i>Refining Anomalous Dispersion Parameters to reflect actual “oxidation states” in gold(I) compounds</i>                                                                     |
| 15:45 – 15:50                                                                       | <b>Closing remarks</b>                                                                                                                                                                                                   |

**Oral presentation: 15 minutes including questions**

**Flash presentation: 5 minutes without questions**