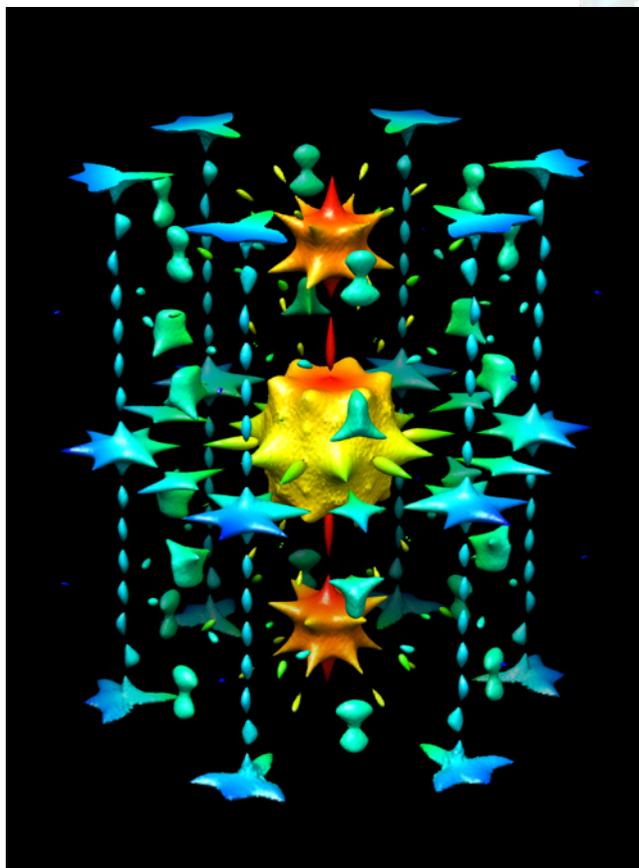


## Dear Crystallographers,

We are glad to invite you for the inauguration of a new Special Interest Group **SIG 14 D<sup>3</sup> "Dynamics, Disorder, Diffuse"**. The meeting will take place **Sunday 26, from 12:00 to 13:00, room Naranco**. All scientists interested in dynamics, disorder and diffuse scattering are welcome to join **SIG D<sup>3</sup>**!

**SIG** is open to all European crystallographers active in the field of crystallography of disorder, diffuse scattering and dynamic phenomena. Participation requires ECA membership.



## About new SIG

**SIG D<sup>3</sup>** brings together scientists working on dynamical properties, disorder and diffuse scattering. The main objectives are to enhance the exchange of information regarding recent progress in experiment and theory, to provide a platform for discussions, to promote use of diffraction and crystallographic tools in studying the physics and chemistry of materials which display some disorder.

**SIG D<sup>3</sup>** aims at achieving a coherent understanding of the various contributions to Bragg and diffuse scattering related to disorder phenomena. The disorder is taken here in a broad sense and includes structural imperfections present at different time and length scales, varying from domain walls to compositional fluctuations and fundamental excitations in non-ideal crystals. We note that this field has experienced a significant revival thanks to the advent of bright synchrotron and neutron sources, the development of new detectors, and the availability of powerful computing tools. **SIG D<sup>3</sup>** also focuses on experimental techniques to probe disorder and dynamical response, and on the processing and presentation of big data sets associated with the study of diffuse scattering. **SIG D<sup>3</sup>** also aims at generating a pool of software and experimental facilities best suited for studies of dynamics and disorder phenomena.

### Some topics of interest

- Diffuse scattering associated with fundamental excitations
- Atomic displacements, thermal diffuse scattering and lattice dynamics
- Occupational, displacive, and orientational disorder in crystals
- Correlation analysis of diffuse scattering, 3D pair distribution functions from diffuse scattering
- Direct space modeling of disordered systems with Monte Carlo and other techniques
- Magnetic diffuse scattering
- Dynamics and disorder at extreme conditions
- Excited state crystallography
- Inelastic X-ray and neutron scattering

**Feel free to come with your suggestions!**

