



## PROXIMA2: Structural **analysis** of biological macromolecules by micro-crystallography

### SOLEIL staff:

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### Areas of application, instrumentation and methodologies used

Energy range: 5-15 KeV

PROXIMA 2 will consist of two independent experimental stations:

- The first experimental station (PX2-A) is dedicated to protein crystallography. Open to users since early 2013, the extremely bright 5 micron beam at PX2-A is adapted to the most challenging structural targets.
- The second experimental station (PX2-B) is planned for future exploitation. Its objectives and design are currently under study.

Biocrystallography

Micro-crystallography: Small and weakly diffracting crystals of biological macromolecules.

Cartography: Optimizing crystal diffraction quality by finding the "sweet spot" on larger crystals (> 10 microns).

SAD & MAD Phasing: Phasing with a range of heavy atoms (Mn, Fe, Cu, Zn, Se, Br, Ln, Pt, Hg, etc.), as well as long wavelength phasing with sulfur.

Chip & plate screening: Screening and sample collection in crystallization trays & microfluidic chips (under development.)

### Major disciplines

Structural biology