Contribution ID: **37** Type: **not specified**

# Processing serial crystallography data measured at FELs and synchrotrons

Our group (group leader H.N.Chapman) is one of the inventors of Serial Crystallography (SX) –the method when many protein crystals are measured in random orientations to get the full 3D structure of the protein. This technique was developed for Free Electron Lasers (FELs) but now it is also becoming a standard technique used at modern synchrotrons. Having a lot of experience and expertise in SX our group is involved in many experiments at the most advanced x-ray sources in the world (LCLS, eXFEL, Petra3, APS, ESRF). Each experiment produces 50-1000Tb of data and we are involved in approximately one experiment per month. Therefore, we have a lot of interesting data to process. And such experiments often results in a high impact publication.

The winter student has a chance to participate in some experiments –depending on the schedule of our beamtimes. If the student likes the data processing activity, the scientific collaboration can be extended outside the time frame of the winter school.

## Field

A4: Development of experimental techniques (methodology oriented)

## DESY Place

Hamburg

## DESY Division

FS

## DESY Group

CFEL-FS-1

## Special Qualifications:

Programming skills with at least Python

**Primary author:** YEFANOV, Oleksandr (FS-CFEL-1 (Forschung mit Photonen Experimente 1))