

NAME

pyFAI-saxs – pyFAI-saxs

DESCRIPTION

usage: pyFAI-saxs [options] **-n** 1000 **-p** ponifile file1.edf file2.edf ...

Azimuthal integration for SAXS users.

positional arguments:

FILE Files to integrated

optional arguments:

-h, --help

show this help message and exit

-v, --version

show program's version number and exit

-p PONIFILE

PyFAI parameter file (.poni)

-n NPT

Number of points in radial dimension

-w WAVELENGTH, **--wavelength** WAVELENGTH

wavelength of the X-Ray beam in Angstrom

-e ENERGY, **--energy** ENERGY

energy of the X-Ray beam in keV (hc=12.398419292keV.A)

-u DUMMY, **--dummy** DUMMY

dummy value for dead pixels

-U DELTA_DUMMY, **--delta_dummy** DELTA_DUMMY

delta dummy value

-m MASK, **--mask** MASK

name of the file containing the mask image

-d DARK, **--dark** DARK

name of the file containing the dark current

-f FLAT, **--flat** FLAT

name of the file containing the flat field

-P POLARIZATION_FACTOR, **--polarization** POLARIZATION_FACTOR

Polarization factor, from **-1** (vertical) to **+1** (horizontal), default is None for no correction, synchrotrons are around 0.95

--error-model ERROR_MODEL

Error model to use. Currently on 'poisson' is implemented

--unit UNIT

unit for the radial dimension: can be q_nm^{-1} , q_A^{-1} , 2th_deg, 2th_rad or r_mm

--ext EXT

extension of the regrouped filename (.dat)

pyFAI-saxs is the SAXS script of pyFAI that allows data reduction (azimuthal integration) for Small Angle Scattering with output axis in q space.