

# Break-out session – STORE

Handout for March 2021 canSAS workshop

# NXcanSAS

Current version:

<https://manual.nexusformat.org/classes/applications/NXcanSAS.html>

# NXcanSAS

- /entry/data/q/resolutions
  - Dataset name corresponding to Q resolution data
  - Multiple entries allowed for 2D slit-smearing geometries (dQw, dQl, etc.)
- /entry/data/q/resolutions\_description
  - Can be a simple description (*i.e.* Gaussian) or metadata on Q resolution data
- /entry/data/q/uncertainties
  - Typically, a standard deviation value of the /entry/data/q/data dataset

# NXcanSAS

- /entry/data/Qdev
  - Estimated  $q$  resolution, usually a standard deviation
- /entry/data/dQw
  - $Q$  resolution along the axis of scanning, primarily for slit-smearing instruments such as Bonse-Hart instruments
- /entry/data/dQl
  - $Q$  resolution perpendicular to the axis of scanning, complements dQw
- /entry/data/Qmean
  - Mean value of  $q$  for the complementary  $q$  datapoint

# NXcanSAS

- /entry/instrument/aperture
  - Shape, x & y gaps
- /entry/instrument/collimator
  - Length, distance (to sample)
- /entry/instrument/detector
  - Slit length properties, detector pixel shape & size
- /entry/instrument/source
  - Beam shape, wavelength(s), beam size

# NXcanSAS

- /entry/sample
  - Thickness (length in grazing incidence)
- /entry/process
  - Q-binning (re-binning?) information used in processing
  - Other information injected after a scan?
  - *Outside of NXcanSAS remit but to be kept in mind for ANALYSE*

# STORE discussion questions

- How can we represent the resolution functions and store the data in a manner that can be used for analysis?
- What changes need to be done to accommodate resolution information?