



Web-based flexible data reduction for neutron reflectometry

Brendan Rowan - SHIP



Caching intermediate results

Stores all calculated values, along with plottable results

Data serialization

Fingerprinting – SHA1 hash

- Fingerprints of ancestors
- All arguments passed to the module
- The output terminal



Offspecular reduction filters

General

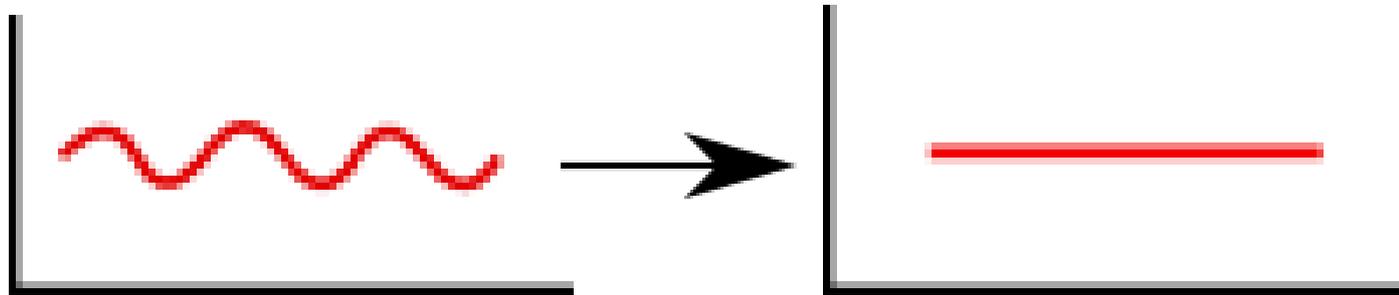
- Wiggle correction
- Offset
- Pixels to 2θ
- Autogrid
- Combine
- θ , 2θ to Q-space

Polarized

- Insert timestamps
- Append polarization matrix
- Polarized combine
- Polarization correction

Wiggle correction

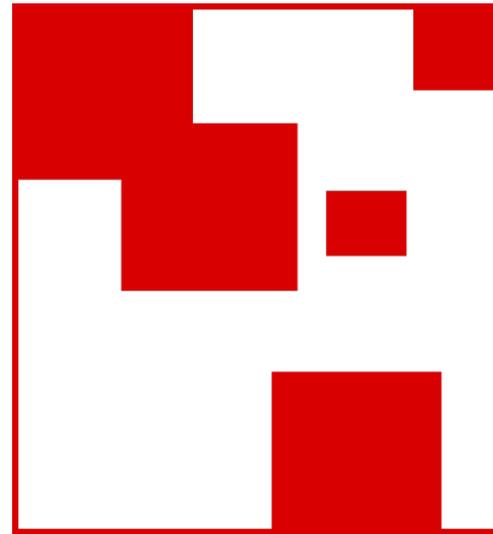
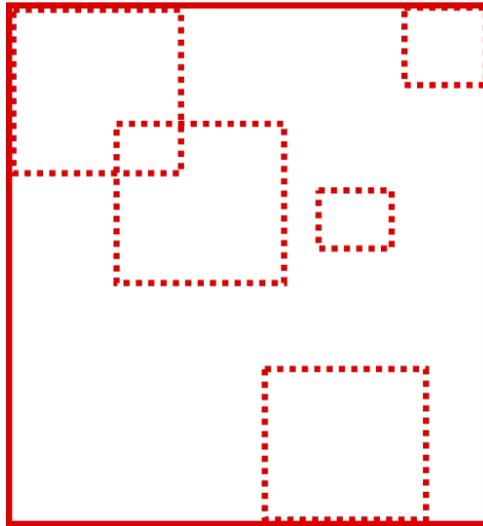
The sensitivity function of the detector needs to be corrected for and can be approximated with a sinusoid



Autogrid/Combine

Autogrid creates an empty grid that covers the entire span of data

Implicit autogrid when combining





Polarization filters

Append polarization matrix – use He3 analyzer info to get time dependence of efficiency

Polarization correct – efficiency correction



Future Plans

Slicing of data – box integrator

- Compare that integral between different spin states and samples

Custom filters

- Use the instrument differently
- Flexibility

Connecting fitting to reduction calculations

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