Scanning Instruments Current and Future Work

Sprint Review Meeting 23/01/2017

Scanning Instruments Design Documents

- ILL Scanning Instrument Requirements Document – https://github.com/mantidproject/documents/blob/17832_Design_document_for_scanning_instruments_at_ILL/Design/Instrument-2.0/ScanningInstruments_ILL.md

- General Design Document for Scanning Instruments within Instrment 2.0 – https://github.com/mantidproject/documents/blob/17832_Design_document_for_scanning_instruments_at_ILL/Design/Instrument-2.0/ScanningInstruments_Design.md

Progress So Far

- GitHub Project for Instrument 2.0 –
  https://github.com/mantidproject/mantid/projects/1

- `API::SpectrumInfo` wrapper class implemented

- `API::DetectorInfo` wrapper class implemented

- `Beamline::DetectorInfo` "real" class holds masking information

- All masking operations are going via `Beamline::DetectorInfo`

- `API::DetectorInfo` has `setPosition()` and `setRotation()` methods

- Python exports for `SpectrumInfo` and `DetectorInfo`, legacy access for masking

Roadmap to Scanning Instrument Support

- Main task – move position information into `Beamline::DetectorInfo`

  - Rollout of `SpectrumInfo`/`DetectorInfo` must be completed for all position access

  - Support for `IComponent::getPos()`?

  - Using `Eigen` for storing positions, rotations and shapes?

  - Anything that can not be re-factored to do moving via `DetectorInfo`?

- Saving scanning workspaces as NeXus – will need to support new way of saving positions, while still loading legacy files

Spectrum/DetectorInfo Rollout - Maintenance Task

- Number #1 issue for Maintenance Tasks –
  https://github.com/mantidproject/documents/blob/master/Project-Management/TechnicalSteeringCommittee/reports/MaintenanceTasks.md

- Document explaining motivation and changes required for rollout methods -
  http://docs.mantidproject.org/nightly/concepts/InstrumentAccessLayers.html

- Umbrella ticket –
  https://github.com/mantidproject/mantid/issues/17743

- Discussion for Mantid Review Meeting tomorrow –
  https://github.com/mantidproject/documents/blob/master/Project-Management/MantidReviewMeeting/2017/review-meeting-2017-1-24.md

Meeting with Simon & Owen

- Meeting with Simon & Owen at ESS – 31st January – 3rd February 2017

- Agenda – https://github.com/DMSC-Instrument-Data/documents/blob/master/meeting_notes/January_2017/scanning.md

- Main aim to work out how to get positions into `DetectorInfo` (as for masking)

- Also need to keep on top of PRs for `SpectrumInfo`/`DetectorInfo` rollout

Work for Next Week

- `SpectrumInfo`/`DetectorInfo` **rollout – keep track of progress and PR reviews**

- **Look into use of** `Eigen`

- **Meeting with Simon and Owen – chance for planning work for the few weeks**