Current status

- `DirectILLReduction` being tested by Björn.
- Fixed bugs in `CalculateFlatBackground`.
  - How to calculate errors in the Moving Average mode?
- Fix for TOF axis problems in progress.
- IN4 IDF merged to master.
- Cleanup in Mantid's unit test helpers.
- PR reviews.

Problems in TOF to ΔE conversion

- ► `ConvertUnits` needs correct TOF (with regards to E_i and L1 + L2 distance).
- ► NeXus files contain somewhat arbitrary TOF, elastic channel may be wrong.
- ► `LoadILLTOF` adjusts the TOF axis.
    - ⇒ Workspaces have somewhat different TOFs.
    - ⇒ Workspace math doesn't work.
- ► It is possible to use a reference workspace in `LoadILLTOF`, but this doesn't solve all the problems.

Solution to TOF to ΔE conversion

- Load data as-is, no TOF axis adjustment.
  - Reproducibly compatible workspaces.
- Adjust the TOF axis just before the TOF to ΔE conversion.
- Cons: the conversion cannot be directly applied to freshly loaded data.
- Updated loader, TOF axis adjustment algorithm.

`DirectILLReduction` TODOs

- Deal with feedback from Björn.
  - Reporting/logging should be improved.
  - Problems with E_i?
  - Convenient masking based on instrument components.
  - Other small corrections.
- Refactoring and unit testing.
- Automatic rebinning (`Regroup` cannot be used, unfortunately).
- Implement something in line with LAMP's `sumbanks`.
- GUI.
- Self-shielding corrections.