



Contribution ID: 9

Type: 15 minute contribution

## Developing a user interface for experiment control at the ISIS neutron and muon spallation source

*Thursday, May 21, 2015 11:00 AM (15 minutes)*

For over ten years the beamline instruments at the ISIS neutron and muon spallation source have been operating successfully using a LabVIEW-based control system. However, a range of new instruments are being built, offering the potential to implement very complex experiments. For this reason, the long-term suitability of the control system was reviewed. Based on this review, it was decided that switching to an EPICS-based system would offer many advantages in terms of flexibility, code reuse and collaboration.

Over the last two years, the ISIS Computing Group has been developing this new EPICS-based control system whilst maintaining the existing system. The new system, which is still under active development, is currently being used to commission a new instrument on ISIS's second target station.

This presentation will describe:

- The strengths and weaknesses of the existing control system and how this has fed into the design of the new EPICS-based system
- The architecture of the new system
- The development of a new graphical user interface
- The current state of the control system and thoughts about the progress so far

**Primary author:** Dr CLARKE, Matt (Science and Technology Facilities Council)

**Presenter:** Dr CLARKE, Matt (Science and Technology Facilities Council)

**Session Classification:** Services