Contribution ID: **22** Type: **Invited talk (+ poster)**

PLCs for neutron instrument control

Tuesday, 15 May 2018 13:00 (30 minutes)

The Jülich Centre for Neutron Science (JCNS) at Forschungszentrum Jülich developed more than 10 neutron instruments during the last decade, which are operated at the JCNS outstations in Garching (MLZ), Grenoble (ILL) and Oak Ridge (SNS). In order to reduce development and maintenance efforts a completely standardized approach for the implementation of the control and data acquisition systems has been chosen. All software and electronics are based on a common framework called Jülich-Munich standard. Key components of the framework are the Tango process control software and the use of standardized industrial automation technology in the front-end. The presentation concentrates on the architecture and components in the front-end including Siemens S7 PLCs and ET200 decentral periphery systems as well as the fieldbus systems PROFINET and PROFIBUS.

Primary author: KLEINES, Harald (Forschungszentrum Jülich)

Presenter: KLEINES, Harald (Forschungszentrum Jülich)

Session Classification: Session VI: Engineering for advanced instrumentation: Electronics and Software