

PROGRESS STATUS FOR THE PETRA3 EMBL BEAMLINES

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Abstract

The EMBL-Hamburg currently commissions three new Beamlines at the DESY Synchrotron Petra3. A small angle solution scattering (SAXS) Beamline and two X-ray crystallography (PX) Beamlines. Beamline Control system is TINE. New TINE features for Beamline control have been developed in close collaboration with DESY. The standard TINE tools like the Alarm Handler the Archive Reader and CDI [Common Device Interface] as well as the high level TINE Motor Server are integrated in the EMBL Beamline control architecture. The Beamline control software consists of a layer concept which will be presented. The control electronics are Programmable Logic Controllers (PLCs) which run the realtime EtherCAT fieldbus protocol. The PLCs perform analog and digital input/output, motor control, signal synchronization and local feedback between devices. The concept will be presented based on the first experience during Beamline commissioning.

**PRESENTATION
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