## PLM-based Configuration Management at the European XFEL

Tuesday 13 October 2015 12:10 (20 minutes)

DESY has established a powerful configuration management solution for the construction of the European XFEL. It provides e. g. mechanisms for part identification and location tracking during fabrication and installation; contains procedures for auditing, change control and handling non-conformities; provides extensive reporting; and offers visualization of the entire accelerator complex. The content of the configuration database ranges from work instructions to individual records of all produced parts. The solution was built using DESY's PLM system (DESY EDMS) as a technology driver for adopting new methods and the corresponding cultural change.

Now, the solution has to be transferred to XFEL operation and maintenance. Technically, change management and non-conformity procedures are suitable to help planning and keeping track of maintenance work. The configuration database is ready to e.g. count cool-down cycles and hours of operation, record incidents, and keep track of replaced parts and other repair work, providing a comprehensive basis for analysis, reporting and status monitoring. On the other hand, DESY has long and successful experience in decentralized operation and maintenance. Hence one of the initial tasks will be to find the right amount of and approach for centralized solutions in a successfully operating decentralized environment.

The presentation will give an overview of the current configuration management solution, introduce concept and capabilities for evolving towards XFEL operation, and stipulate discussion on how to find the best balance of centralized and de-centralized processes and tools.

Primary authors: FRANK, Alexander (DESY); LIST, Benno (DESY); KÄFER, Daniela (DESY); DAMMANN,

Jasper (DESY); KREUTZKAMP, Jens (DESY); HAGGE, Lars (DESY); ROHWEDDER, Silke (DESY)

Presenter: LIST, Benno (DESY)

**Session Classification:** Workshop Presentations

Track Classification: Configuration, change, quality and risk management