



Contribution ID: 13

Type: ORAL

Exploiting the Potential of the Hydrostatic Leveling System (HLS) at the Swiss Light Source (SLS)

Only in recent years of SLS operation the potential of the HLS system with 192 Levelsensors has been fully exploited. A vertical realignment campaign as part of the quest to realize a very small vertical emittance of 1 pm.rad led to an increased interest in the HLS system in 2011. Electron beam-based measurements, alignment survey data and HLS data were compared and found to be consistent over a large range of time scales from seconds to years. Thus the HLS can not only be used for the detection of long term settlements as it was designed for in the year 2000, but also for the monitoring of deliberate girder position manipulations with the remotely controlled girder alignment system of the SLS. In addition a recent software upgrade provides a much improved handling and control system integration of the HLS system.

Summary

Author: BOEGE, Michael (Paul Scherrer Institut)

Co-author: MEIER, Edi (Edi Meier + Partner AG, 8406 Winterthur, CH)

Presenters: MEIER, Edi (Edi Meier + Partner AG, 8406 Winterthur, CH); BOEGE, Michael (Paul Scherrer Institut)