

Contribution ID: 20

Type: not specified

Status of the EPICS-based control system for the 100-MeV proton accelerator at KOMAC

Wednesday, April 17, 2024 2:45 PM (25 minutes)

KOMAC operates a 100 MeV proton linear accelerator comprising a 50-keV injector, a 3-MeV radio frequency quadrupole, a 20-MeV drift tube linac, and a 100-MeV drift linac. To meet the demands of beam users, we have established 10 beamlines: five for 20MeV and five for 100-MeV beams. The proton beam is accelerated to 100 MeV by the linac and then directed to target rooms via the beamlines. The control hardware system employs multiple architectures, including VMEbus, PXI, PLC, and Linux, to operate the linac. Furthermore, the Experimental Physics and Industrial Control System serves as the control system framework for the distributed control system and the Control System Studio is adopted as the Graphical user interface toolkit at KOMAC. This paper describes the detail of the overall control system for KOMAC linac.

Primary author: KIM, Jae-ha (KOMAC/KAERI)

Co-authors: KWON, Hyeok-Jung (Korea Atomic Energy Research Institute); Mr CHO, Sung-Yun (KOMAC/KAERI); SONG, Young-gi (KOMAC/KAERI)

Presenter: KIM, Jae-ha (KOMAC/KAERI)

Session Classification: Status Reports

Track Classification: Status Reports