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Development of EPICS-based DAQ system for real-time data acquisition during beam and RF operation

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The data acquisition system is newly developed for more precise signal measurements in KOMAC 100 MeV linac. Beam and RF signals measured by the diagnostic equipment may be collected using various devices. While oscilloscopes are capable of precise signal analysis, it is difficult to collect synchronization data with other devices while operating large accelerators. The data acquisition system was intended to be applied to collect and share synchronization signals generated when the accelerator was operated. The measured beam and RF signals are graphically displayed in the operator's console room after the process of collection, averaging, and calibration by DAQ. The data may be stored for further reference and may be transmitted to the main console computer to access the control program for linac. In this paper, we report on the construction of integrated development for DAQ systems that can collect real-time beam current and RF signals.

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Paper submission Plan

No

Best Presentation

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Contribution track

ICABU WG1. Accelerator Systems

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