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Design and development of JUNO DAQ Data Flow Software

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The Jiangmen Underground Neutrino Observatory (JUNO) is a neutrino experiment under construction with a broad physics program in southern China. The primary physics goal of JUNO is to measure the order of neutrino mass. The front-end electronics of JUNO will generate approximately 40GB/s of raw data, including data in various formats from multiple detectors. A large distributed data acquisition (DAQ) system needs to be developed and designed.

The JUNO DAQ system is mainly divided into data flow software and online software. The data flow software is responsible for the readout, online processing, and storage of raw data, while the online software provides services such as software configuration and operational control.

This presentation will introduce the design architecture of the JUNO DAQ data flow software, and will discuss the recent progress in software development by incorporating relevant test results.

Keywords: JUNO DAQ dataflow

Minioral

Yes

IEEE Member

No

Are you a student?

Yes

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