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Development of next-generation timing system for the Japan Proton Accelerator Research Complex

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A precise and stable timing system is necessary for high intensity proton accelerators such as the J-PARC. The existing timing system, which was developed during the construction period of the J-PARC, has been working without major issues since 2006. After a decade of operation, the optical modules, which are key components for signal transfer, were discontinued already. Thus, the next-generation timing system for the J-PARC is under development. The new system is designed to be compatible with the existing system in terms of the operating principle. The new system utilizes modern high speed signal communication for the transfer of the clock, trigger, and type code. We present the system configuration of the next-generation timing system and current status.

Minioral

Yes

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No

Are you a student?

No

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