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Development of the beam diagnostic system of the HUST-PTF transport lines

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Huazhong University of Science and Technology is building a cyclotron-based Proton Therapy Facility (HUST-PTF). The facility mainly consists of a 240MeV superconducting cyclotron, a beam transport line, a fixed treatment room and two rotational treatment rooms. HUST-PTF uses three kinds of detectors, Scintillation, Faraday cup and ionization chamber, for the beam param-eter measurements. In terms of structure, the HUST PTF beam diagnostic system is built according to the standard distributed three-layer structure, which is divided into hardware device layer, data processing layer and GUI layer. Different protocols are used to communicate be-tween the three layers, which can improve reliability and expand flexibly in each layer.

Footnotes

Funding Agency

I have read and accept the Privacy Policy Statement

Yes

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