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A Detector for Proton Computed Tomography Project

We present a status of detector for proton computed tomography project using scintillating fiber trackers and a scintillator stack. The area of range stack is about 27cm by 36cm. It consists of 96 scintillating tiles of 3.2mm thickness readout with 1.2 mm diameter Y11 Kuraray WLS fibers connected to 192 silicon photo detectors. Extensive research for optimization light output and uniformity of response to radioactive source will be reported. Prototype of modular-frame design was 200 MeV proton beam and Bragg peak tested. In this presentation we focus on the current state of the detector and preliminary results from test beam runs. Full hardware system will be ready for commissioning in April 2013.

quote your primary experiment

Proton Computed Tomography

Primary authors: Dr DYCHKANT, Alexandre (Northern Illinois University, USA); Prof. COUTRAKON, George (Northern Illinois University, USA); Prof. BLAZEY, Gerald (Northern Illinois University, USA); Dr ZUTSHI, Vishnu (Northern Illinois University, USA)

Co-author: Mr JOHNSON, Eric (Northern Illinois University, USA)

Presenter: Dr DYCHKANT, Alexandre (Northern Illinois University, USA)

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