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Automatization of LFHCal scintillating tile evaluation for the ePIC detector at the EIC

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The Longitudinally Segmented Forward Hadronic Calorimeter (LFHCal) is being designed for the ePIC detector at the Electron Ion Collider (EIC). One of its main motivations is to reconstruct jet energies with high precision in the $1.2 < \eta < 3.5$ rapidity range. The current design plans to use ~83k machined and ~480k injection molded scintillator tiles with silicon photomultipliers (SiPMs) coupled to them. During the construction, it is of critical importance to evaluate the quality of these tiles in terms of their photon yield and dimensional tolerances. Dimensional scans are particularly more important for machined tiles. In this talk I will present the customized set up to automatically scan the tiles with a Sr^{90} source to test for uniformity of photon production and an optical dimensional process for bulk characterization.

Primary author: GARG, Prakhar (Yale University)

Presenter: GARG, Prakhar (Yale University)

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