

Development of Scintillator Electromagnetic Calorimeter for ILC

Tuesday, 27 November 2018 14:55 (20 minutes)

International Linear Collider (ILC) is a project of a future electron–positron collider and one of its goals is precise measurements of the Higgs particle.

We are developing Scintillator Electromagnetic Calorimeter (ScECAL) with SiPM as one of candidates of electromagnetic calorimeter for ILC.

ScECAL consists of 2mm x 5mm x 45mm scintillator strips and SiPMs.

We have fabricated some types of prototypes with different combinations of scintillator strips and SiPMs, in order to optimize the detector which has enough dynamic range, while having good separation of MIPs from noise with embedded read out electronics board for ScECAL.

We tested them with positron beam at Tohoku University this month as well as beta ray source.

In this talk We will report recent status of development.

Primary author: Mr YOSHIMURA, Yuya (Shinshu University)

Presenter: Mr YOSHIMURA, Yuya (Shinshu University)

Session Classification: Tuesday afternoon