

Measurements of angular distribution and spectrum of transition radiation with a GridPix detector

Thursday, 5 October 2017 17:55 (15)

In recent years, developments of gaseous detectors based on a combination of electron multiplication gap in the gas and pixel readout chips as a part of the anode plane (GasPixel detectors) reached a level where they can offer unique opportunities for particle detection. Transition radiation (TR) detectors based on this technology can be one of the possible applications. In this work, measurements of energy spectra and angular distributions of transition radiation photons produced by particles with different gamma factors made with a GridPix detector prototype are presented. The observed results are compared with theoretical predictions.

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Session Classification : Facilities and advanced detector technology - 2

Track Classification : Facilities and advanced detector technologies