

The sampling electromagnetic calorimeter with longitudinal segmentation.

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The electromagnetic (EM) calorimeter with longitudinal segmentation, its design and beam test results are presented. The EM calorimeter of “shashlik” type was divided longitudinally on 4 tiles. The idea of such calorimeter type was an improving the particles identification take in account longitudinal shower profile for electrons, muons and hadrons. This calorimeter via a single module was tested at IHEP U-70 and CERN PS in 2007. The experimental results were presented for particles identification in 5 GeV beam with 80% pions, 15% positrons and 5% muons. In current report are presented new idea for design and construction for calorimeter based on “shashlik” type with longitudinal segmentation with SiPm photo sensors.

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