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## **Analysis of testbeam data recorded with the large CALICE AHCAL technological prototype**

*Thursday, 18 March 2021 11:40 (20 minutes)*

The Analog Hadron Calorimeter (AHCAL) concept developed by the CALICE collaboration is a highly granular sampling calorimeter with  $3 \times 3 \text{ cm}^2$  plastic scintillator tiles individually read out by silicon photomultipliers (SiPMs) as active material. We have built a large scalable engineering prototype with 38 layers in a steel absorber structure with a thickness of  $\sim 4$  interaction length. The prototype was exposed to electron, muon and hadron beams at the DESY and CERN testbeam facilities in 2018. The high granularity of the detector allows detailed studies of shower shapes and shower separation with the PandoraPFA particle flow algorithm as well as studies of hit times. The large amount of information is also an ideal place for the application of machine learning algorithms.

The presentation will give an overview of the ongoing analyses.

### **Time Zone**

Europe/Africa/Middle East

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