

Electron Analysis with the DIRAC digitizers in 1998 Module0 test beam.

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Abstract

Results are reported on the electron analysis performed with the 1998 Module0 data, using the new DIRAC digitizers.

1 Introduction

2 Experimental Setup

The ATLAS Barrel Tile Calorimeter Module0 was tested in the H8 beam of the CERN SPS accelerator, in the period June-July 1998. The module was the one used in the 1996 test beam, but equipped with a new batch of scintillators and with different types of WLS fibres (Pol.Hi.Tech on the positive η side and Bicron on the negative η side). 5 DIRAC Digitizer boards - each one with six channels - were installed for the first time, resulting in 29 working channel. The boards were located in Drawer A (on the negative η side) and were read by 45 PMTs.

3 Data

Several runs were taken with electrons at 90^{deg} , shooting against a tile center, taking one tile size per sampling (namely, tile #2, #7). After the reparation

In each run between 1 and 1.5 Kevts were collected. The data available are listed in table ??

Energy (GeV)	Ntuple	Evts	Tile
50	44373		2
	44374		2
	44370		5
	44371		5
	44372		5
100	44321		2
	44325		2
	44322		7
	44323		10
	44324		10

Table 1: *List of runs used to study he new digitizer in the 1998 Module0 test beam.*

4 Results

4.1 Pion removal

4.2 Resolution

4.3 Comparison of electron data with the new and old digitizer

5 Conclusions

References

[1]

Figure 1: