

Test Beam Preparation APD Paper

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APD meeting



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Test Beam with the RD51 collaboration

Provided:

- Tracking: resolution $40\text{ }\mu\text{m}$
- Timing reference: MCP-PMT

Setup:

- Agilent scope 2.5 GHz, 100 ps sampling
 - CH1: Det 1
 - CH2: Det 2
 - CH3: MCP-PMT
 - CH4: Telescope evt number
- 2 CIVIDEC amplis 2 GHz, 2 kV
- ISEG HV
- Temperature monitoring

Main goals:

- Timing with MIPs
- Uniformity of response
- Detection efficiency

Detectors ($\Phi_{eq} = 0$):

(? := det. to be tested)

- 1 Pad-diode
- 4? metallized 8x8 APDs
- 1? bare 8x8 APD
- 1? gold plated 8x8 APD
- 1? 2x2 APD
- if possible 1 8x8 APD on Penn board
- 2? $50\text{ }\mu\text{m}$ LGADs
- ?? 2 APDs with mesh on our PCBs (from Bert) need potting before testing ??

- On 13.03.2018 we agreed on a deadline for the write-ups about:
laser tests of mesh APDs
beam test data
- Deadline: 15.04.2018 <https://indico.cern.ch/event/713110/>
- I did not receive any write-ups nor additional comments on what was written so far
- How do we proceed?

Backup Material