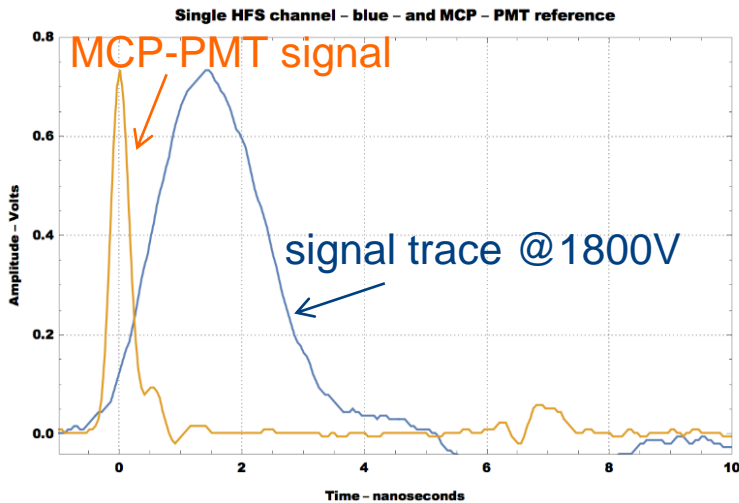- Sensors tested in parasitic mode
- Used both scope and SAMPIC multi-channel readout
  - SAMPIC is a waveform and time-to-digital converter
  - allows fine-time measurement (a few ps resolution)

SAMPIC

Si telescope

Single HFS channel – blue – and MCP – PMT reference

MCP-PMT signal

signal trace @1800V

a) Setup with the SAMPIC and the Si telescope

b) Signal trace @ 1800V and 50 dB preamp with MCP-PMT signal

Test beam @ H4

signal traces
(green & red)

MCP-PMT signal

- Signal traces from SAMPIC
- unpacked data

```
--------- Hit Info -----------
HitNumber = 1026
Channel = 0
CellInfoForOrderedData = 15
SampicTimeStampA = 3621
SampicTimeStampB = 3620
FPGATimeStamp = 196726445
Cell0TimeStamp = 3934526180.000000
TriggerCellTimeInstant = 3934526164.687500
CFDTimeInstant = 3934526175.877658
ADCCounter_LatchedAtEndOfConv = 2050
DataSize = 64
0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0.998906 0.999279 0.998598 0.999878 0.999233 0.998442 0.998191 0.997647 0.999367 0.998410 0.998535 0.997473 0.998303 0.997335 0.998994
0.998553 0.999054 0.998908 0.997926 0.998786 0.997383 0.998249 0.999562 0.997274 0.998784 0.998384 0.998256 0.999139 0.997679 0.996736
0.994279 0.991182 0.987693 0.984339 0.977659 0.969598 0.960126 0.950064 0.940392 0.932378 0.928126 0.925521 0.926701 0.928497 0.931688
0.934432 0.940405 0.943751 0.946280 0.947305 0.948870 0.949718 0.950246 0.953187 0.955155 0.961041 0.965325 0.966598 0.970605 0.972785
0.973051 0.975327 0.977096 0.978340
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```