Opportunities in the 2017 PICOSEC testbeam Runs

SNW Aug.1 2017 HFS mtg.

as in 2016, 3 running periods-> July, August, October full tracking+ MCP start timing

HFS tests in 2016-> too little full area scan (Penn0) asymmetry in time of Arrival and amplitude (up-down!) today we know x,y were reversed likely that asylum due to hi inductance interconnect?

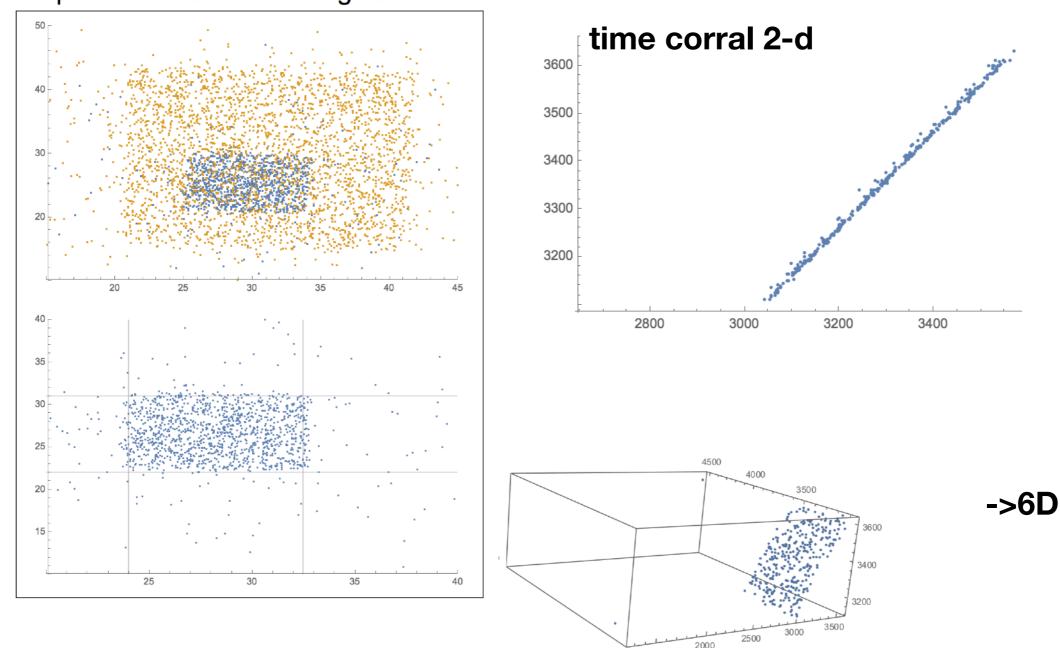
for July we received Penn1&Penn2
Penn1 looked good to ~1730 in lab so went to beam
operated for most of 2 weeks up to 1776V @<0.5microAmp

July beam test

- some early results on Mitch Newcomer amp performance (see attached)
- also some lessons learned and near term analysis goals

we need some 100k event runs-ie for Florian!

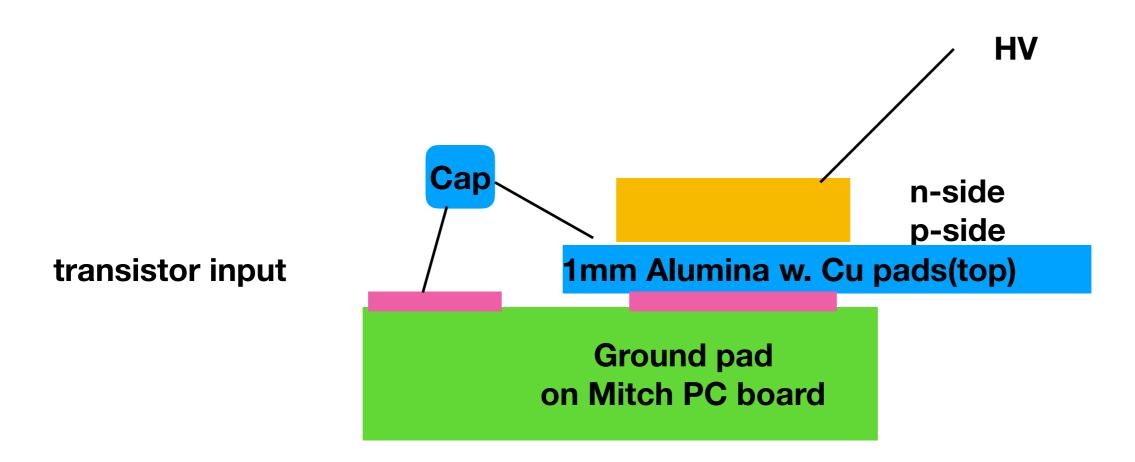
Output from a 18 k event Large Scint Run



Aug./Oct plan

- take a chance that recently metalized (by Matteo and Sofia) are viable path for testing before/after irradiation
- deliver Penn3 amp to CERN and we will mount detector.
- try to do mounting so it could dismount for irradiation
- choose best mounting for this 2 terminal device
- we have some sketches

1 scheme



Picosec project aims

- go to resistive micro megas (done and good performance - we now beat 25 picosec)
- install multipixel (this week)
- better systematic measurements (in situ 1 photoelectron data...)