

(Bi-)Weekly Update

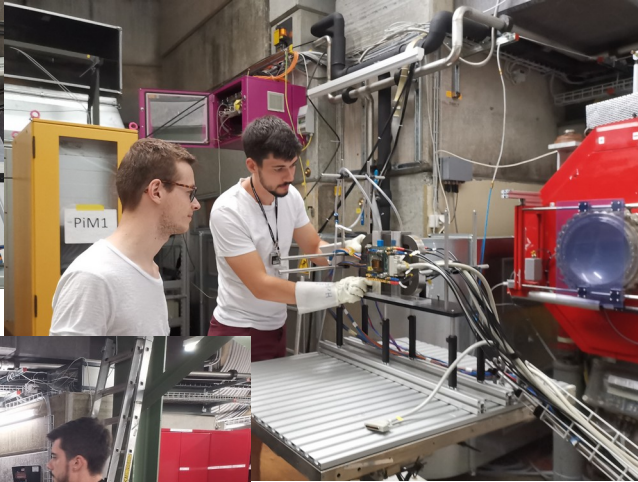
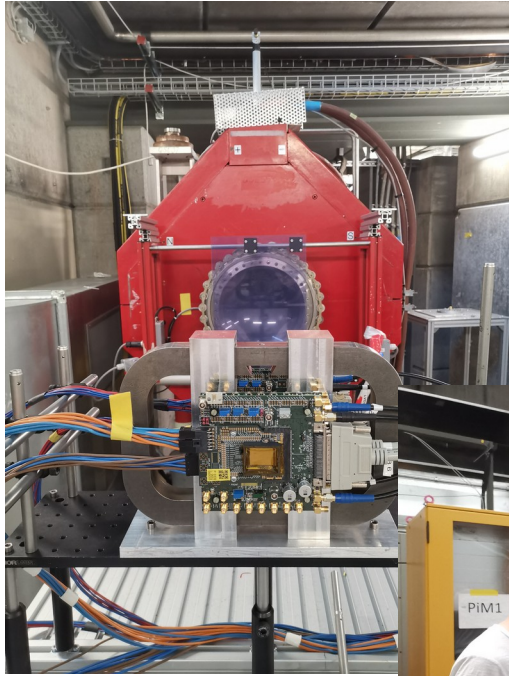
- Testbeam/Commissioning@DESY
- MuPix Spectrometer
- MuPix11
- Software news
- New Bonder

PSI-Testbeam -- Area PiM1



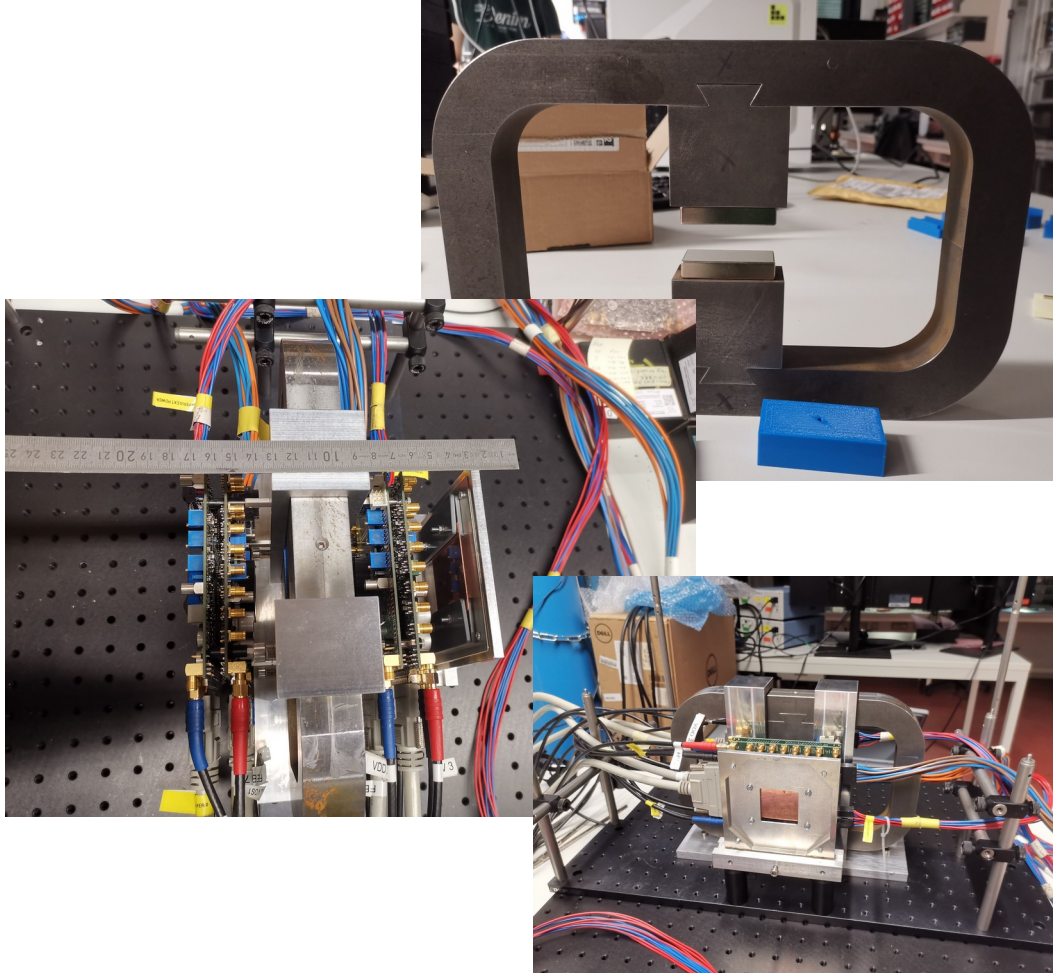
- Mixed pion beam ($\pi\mu e$)
- Specified from 100-500 MeV
- Also running at lower energies 35MeV (low particle rate)
- Goal(s) of Testbeam:
 - 1) Commissioning of HV-MAPS/MuPix-Spectrometer
 - 2) Make first in-beam investigations with MuPix11 if available

How is it going?



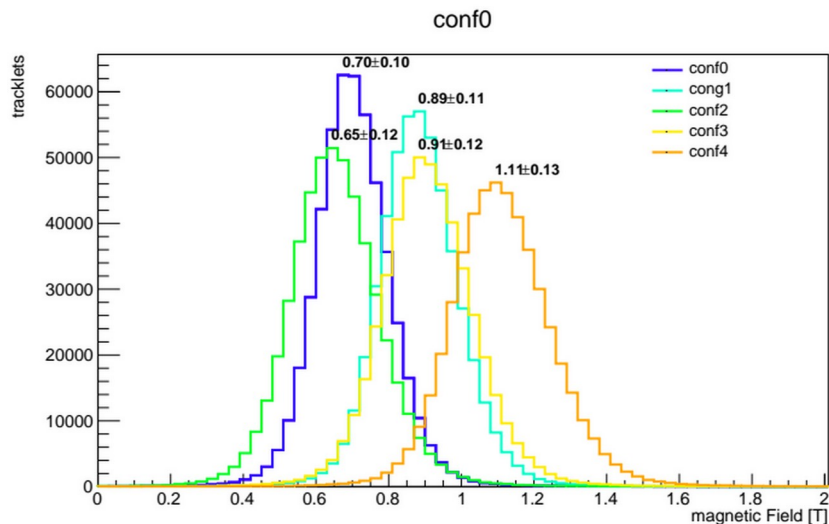
- 2 weeks (22.8.-4.9.)
- Staff: Lukas, Ruben, David, Heiko
- First time operation of MuPix Spectrometer
- Analysis on-the-fly
- Added time information in the second week
- MuPix11 arrived here yesterday night
- MuPix11 in the beam right now

The MuPix Spectrometer

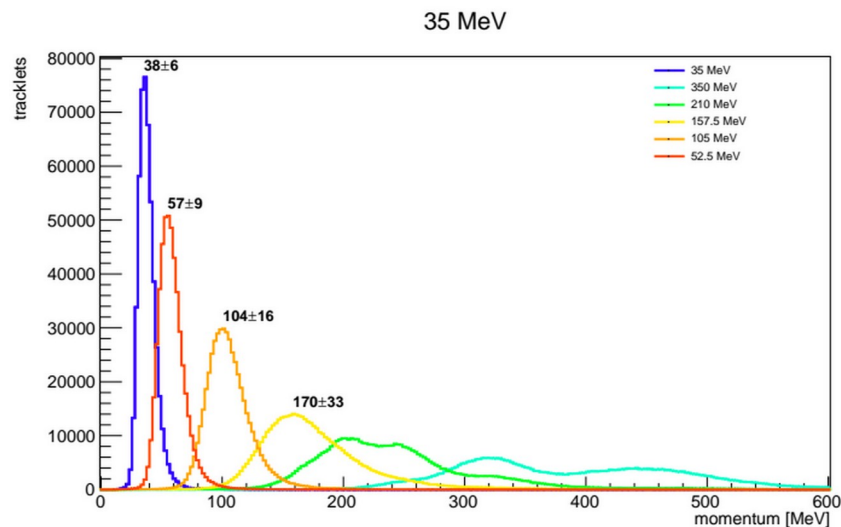
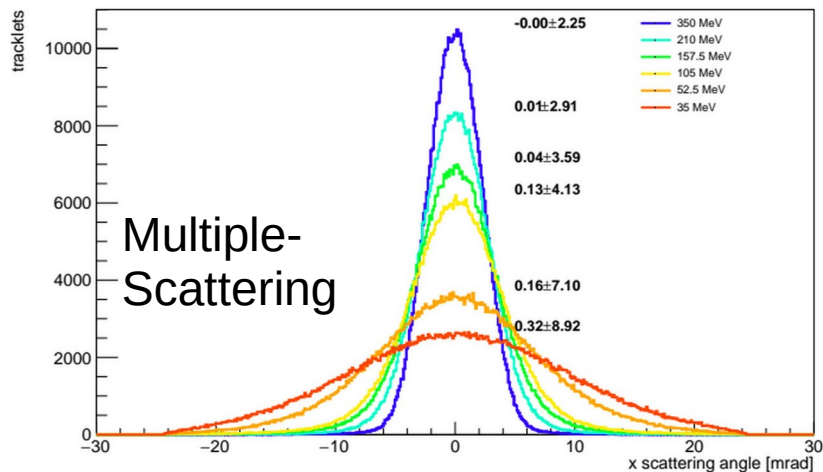


- Motivation:
Thin sensors allow measurement of low energy electrons with little multiple scattering
- PSI-practical course needs to measure 70 MeV photons from $\pi^+ \rightarrow \gamma\gamma$
→ Build our own spectrometer with “house hold” magnets
- Stack:
2xMuPix - Magnet - 2xMuPix

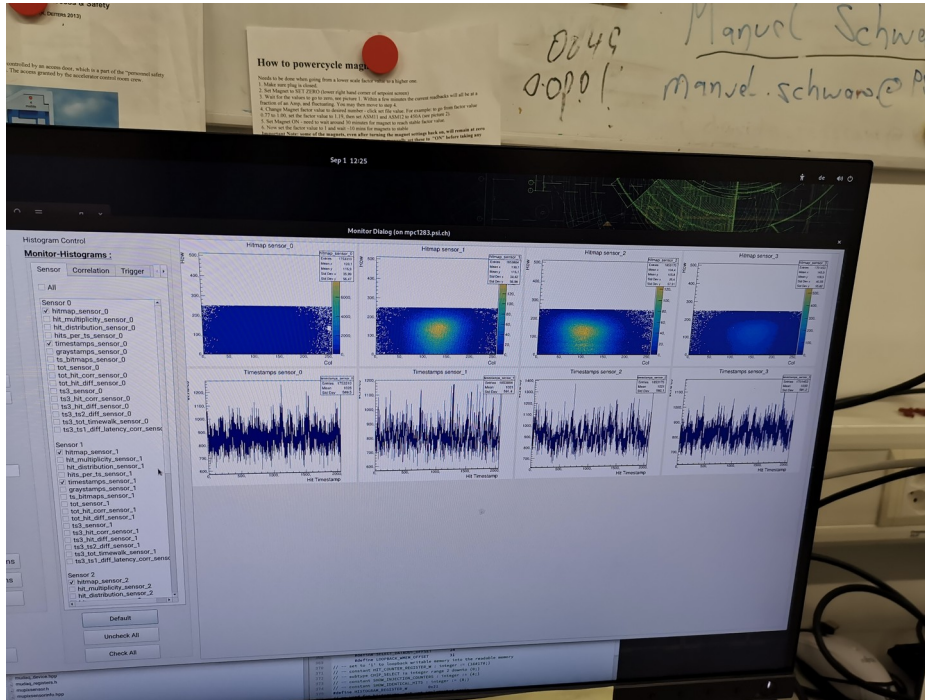
First Results



- Measure kink of up- and down-stream tracks
- Simple reconstruction:
extract bending radius
→ momentum/B-Field
- Analysis written on-the-fly as Corry-Module



MuPix11



- Arrived in HD last week Tuesday
→ immediately picked by Benni, David and Tamasi
- David got them to run in the lab
- David and MuPix11 arrived at PSI yesterday
- MuPix11 is in the beam right now
→ It works!