

Test beam planning on resistive Micromegas by Clas12 + Compass Saclay groups

Characterization of Micromegas prototypes with resistive layer at high hadron flux

- pion test beam on SPS from 22/10 to 1/11/2009
- study of resistive prototypes performances in high discharge rate environment
- discharge rate, gain and efficiency measurements on ~5 prototypes (3 in the same time)
- spatial resolution measurements if tracker available ($\sigma_x \sim 100\mu\text{m}$)
- combined scans foreseen: mesh HV (~10 points), drift HV (~5 points), drift space (~3 points)
- 128 channels / prototype to read with Gassiplex and/or T2K readout
- custom DAQ, read-out of external detectors to be investigated
- flammable gas mixture (Ar-95%, $i\text{C}_4\text{H}_{10}$ -5%)
- dimension of each detector: $150 \times 100 \text{ mm}^2$ (active area $100 \times 100 \text{ mm}^2$), longitudinal size 50mm