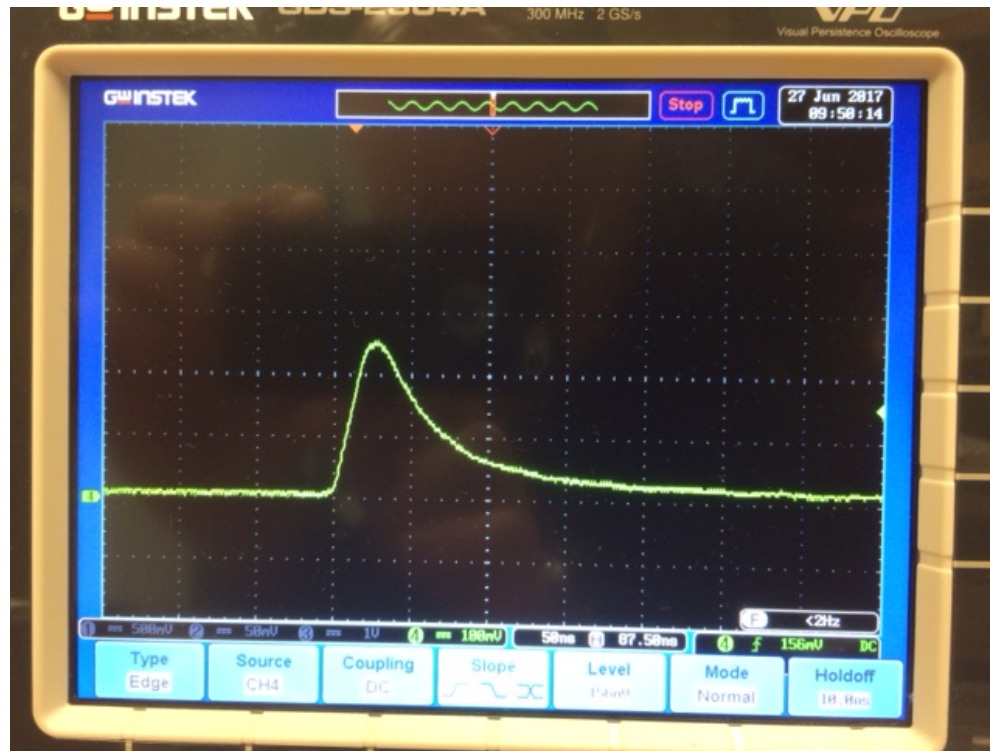


## MWPC response to $^{55}\text{Fe}$ x-ray source:

When x-ray is absorbed on Ar, a 5.9 keV  $\beta$  is emitted by the photo-electric effect. The track length for a  $\beta$  of this energy is about 1 mm. Approximately 227 electron ion pairs are produced.



A minimum ionizing electron passing perpendicular to the wire plane deposits on average 5.0 keV of energy from atomic collisions. Approximately 192 electron ion pairs are produced along a 2 cm track.

Orders are being placed for:

- 50 preamp boards, 24 channels/board
- 50 HV boards
- The electronic components for those boards
- 7 sets of aluminum honey-comb plates, we already have an 8<sup>th</sup> set in-house.

### Carbon tube update:

- We've replaced 3 carbon tubes. When biased the wires are OK.
- Another carbon tube has failed.