

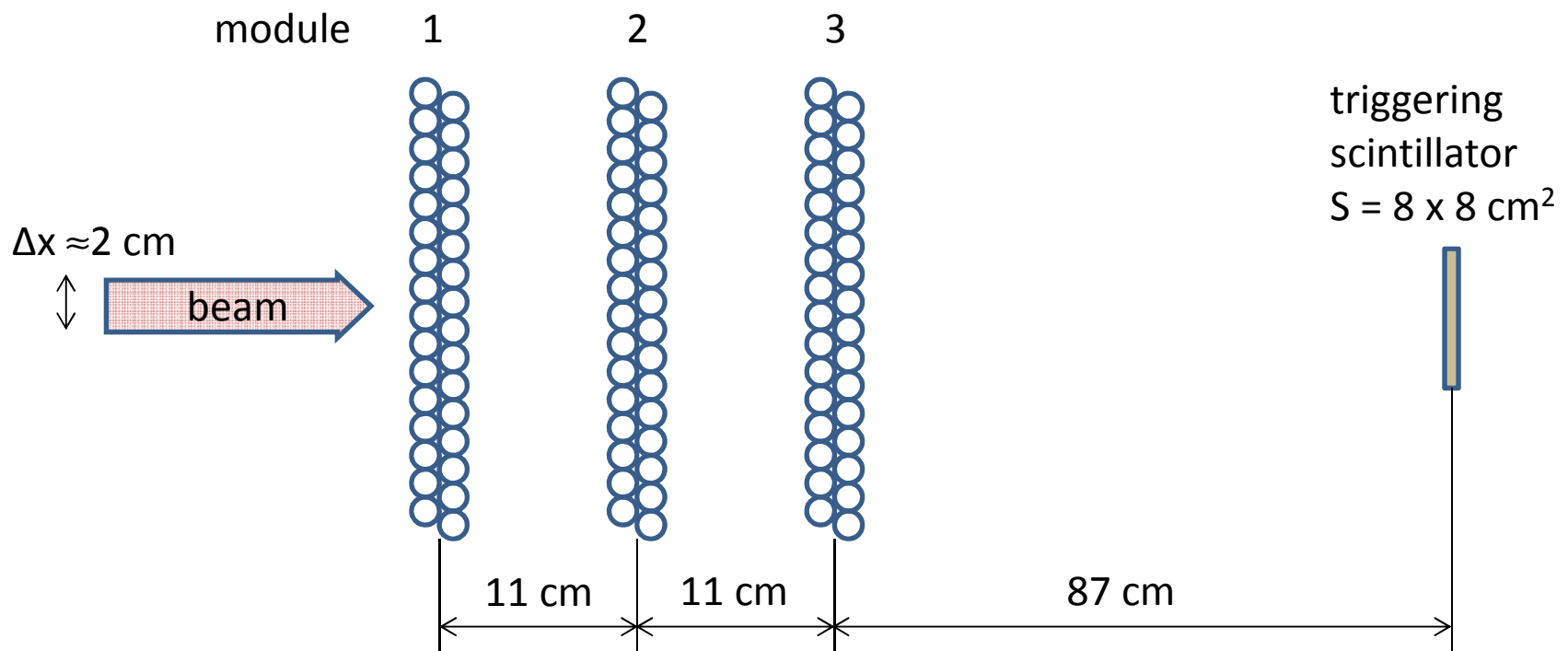
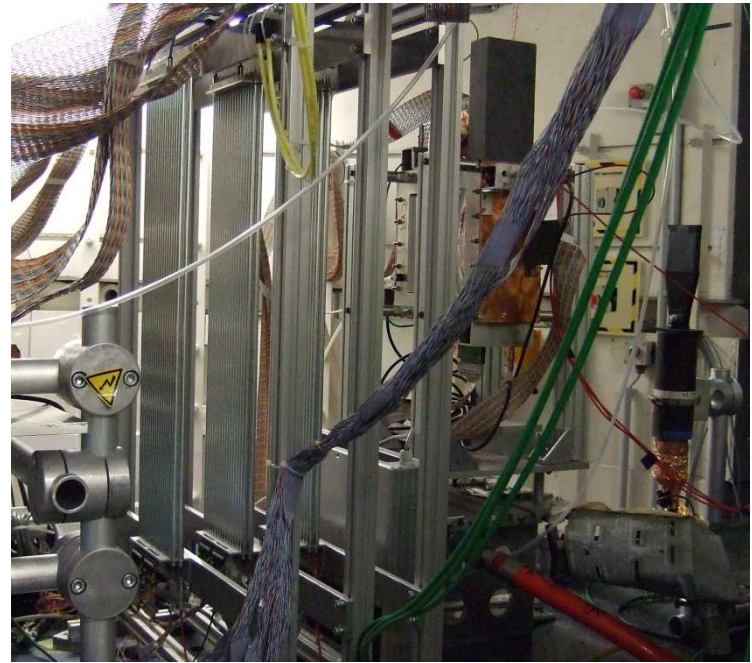
# Test of prototype FT modules at COSY (4-8 May 2015)

J. Smyrski

# Beam

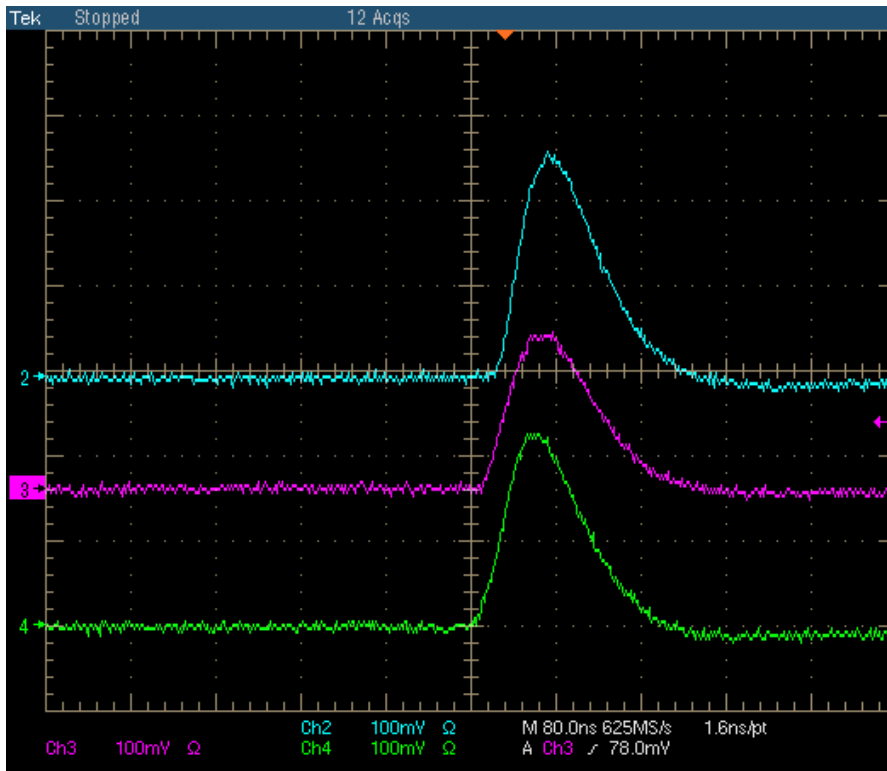
- Protons
- Momenta 2.95, 0.8, 0.6 GeV/c
- Intensity  $\sim 400$  kHz
- Beam spot  $\Delta x \approx 2$  cm,  $\Delta y \approx 4$  cm

# Detector setup

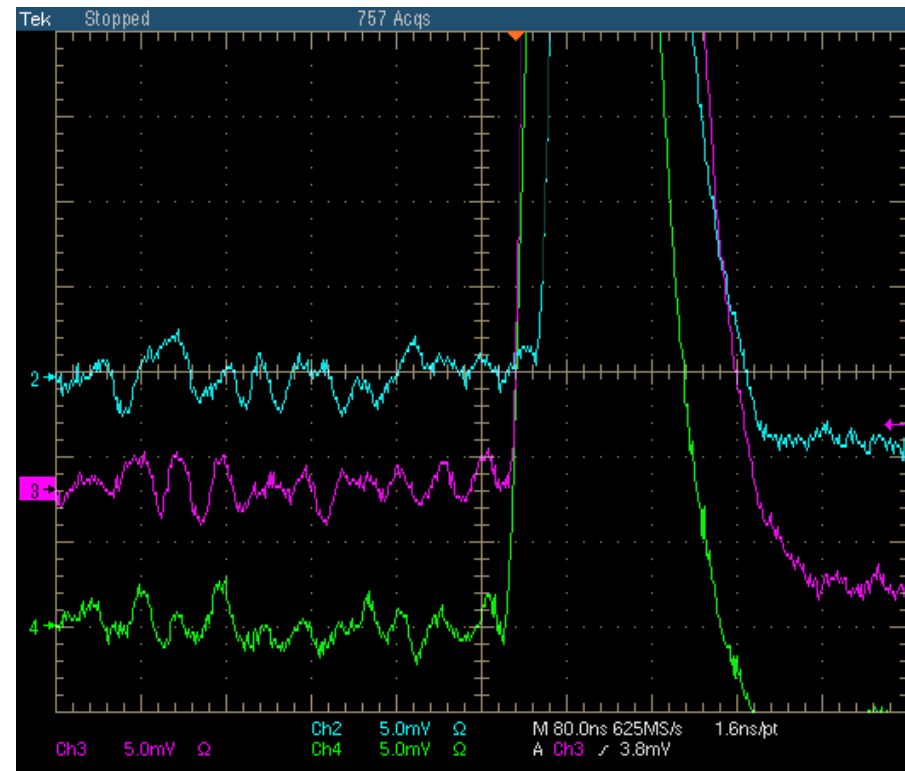


# Straw tube pulses

- 2.95 GeV/c protons, HV=+1800 V



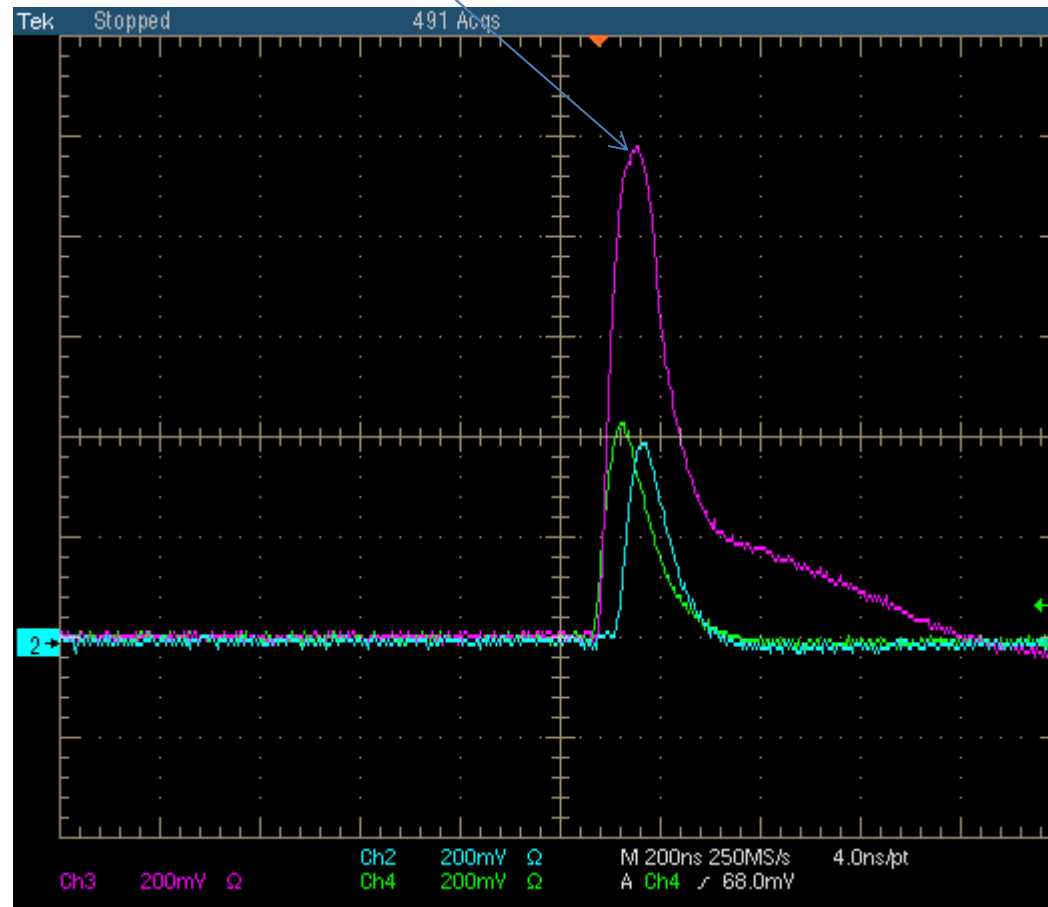
With „slow shaping”  
peaking time  $\sim 40$  ns,  
pulse duration  $\sim 200$  ns, slight undershoot,  
typical amplitude 200-300 mV



Noise  $\sim 2$  mV

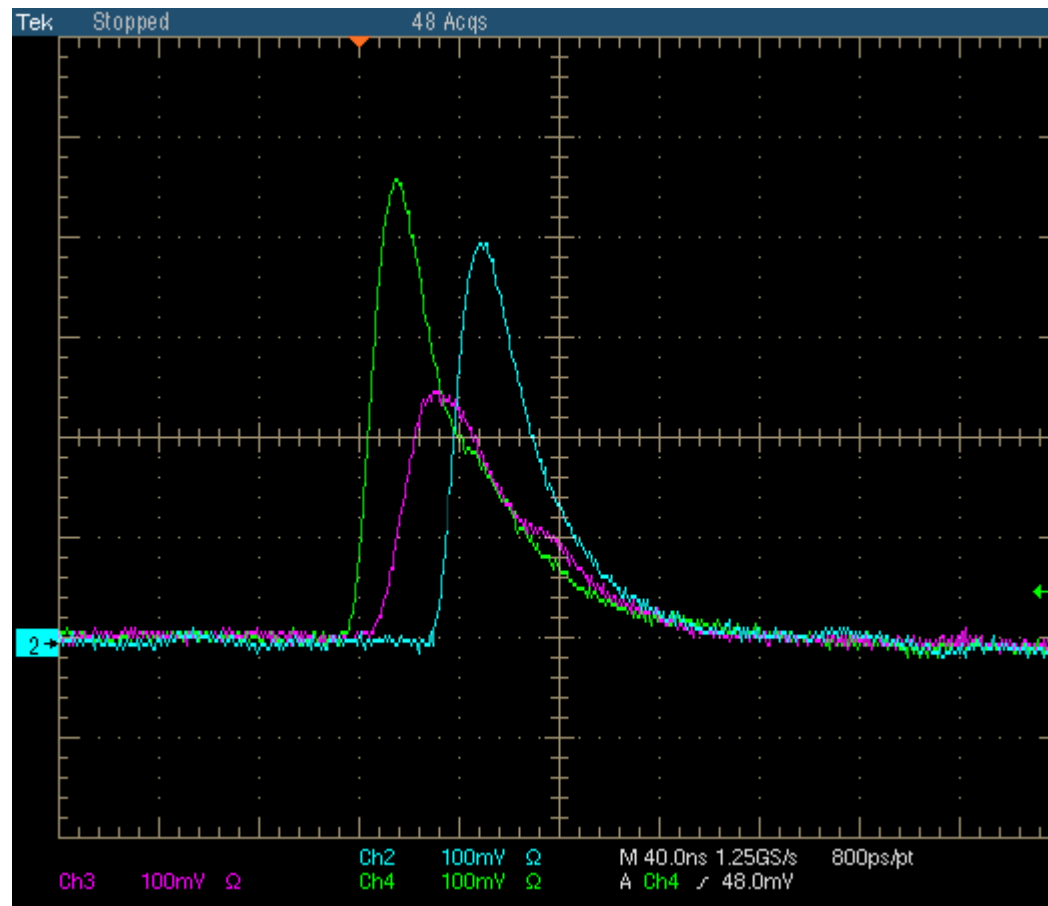
# Saturation

- Range of analog output pulses  $\sim 1V$
- Saturation seldom



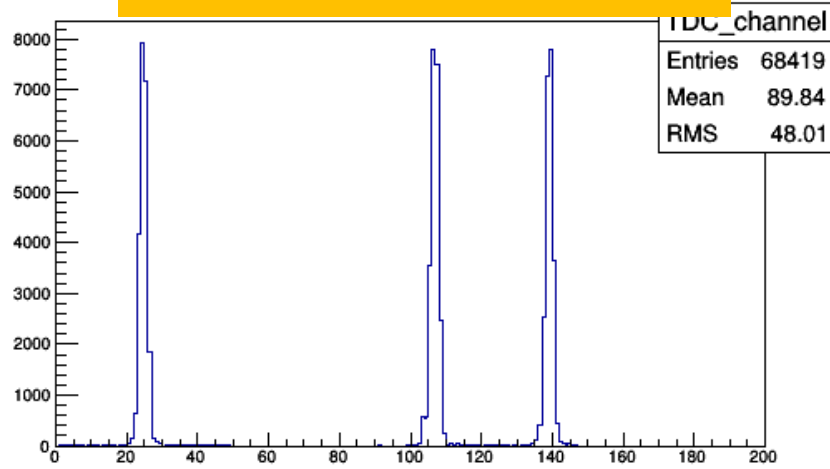
# Fast shaping

- peaking time  $\sim 20$  ns,  
pulse duration  $\sim 150$  ns, no undershoot

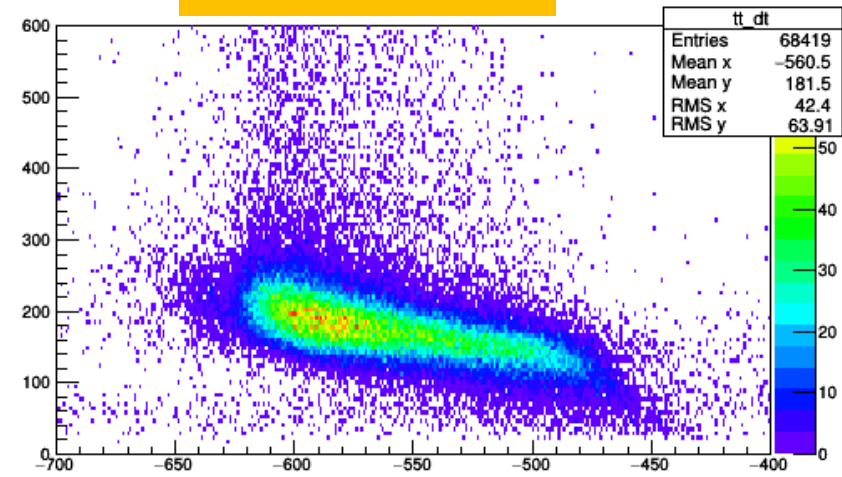


# Control histograms

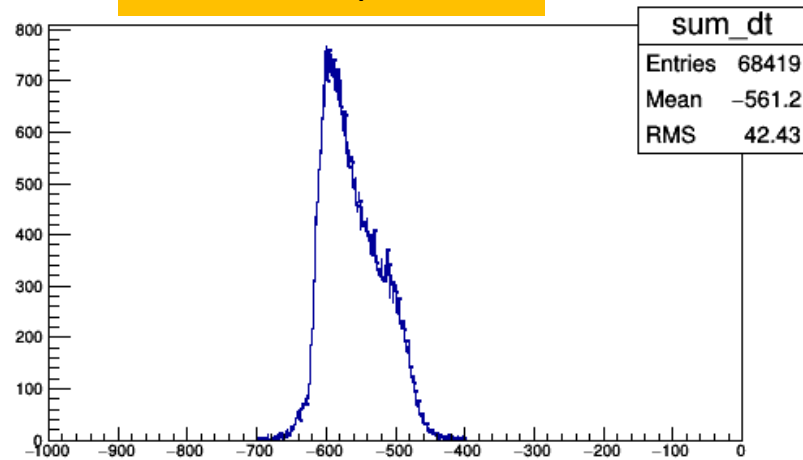
Counts in individual channels



TOT vs. drift time



Drift time spectrum



Multiplicity of coincidences

