PVDIS BAFFLES UPDATE

Rich Holmes (Syracuse)

June 30, 2016 SoLID simulation meeting

π^- (Hall D) generator, full apparatus, π^- entering LGC:

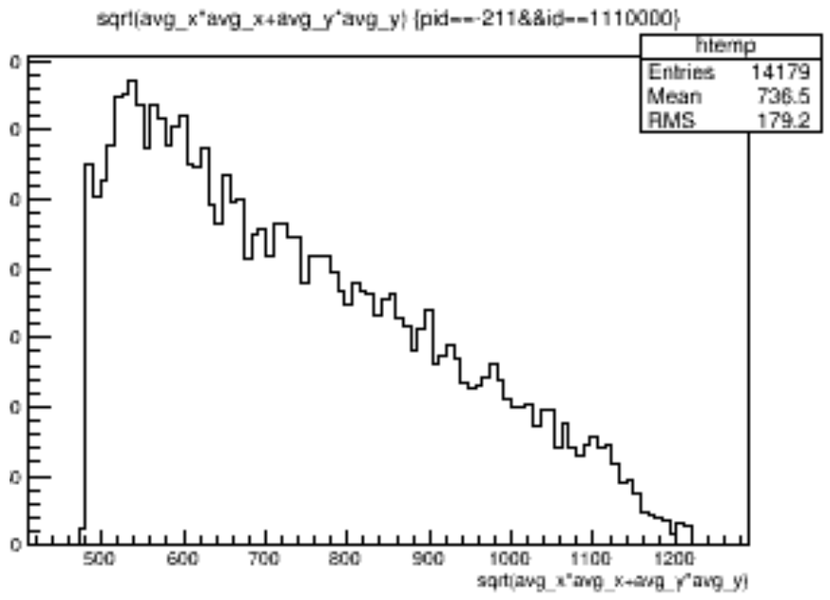
- Kryptonite baffles and no other materials: lower rate for CLEO2 baffles than for More1 baffles
- Lead baffles and full apparatus: 50% higher rate for CLEO2

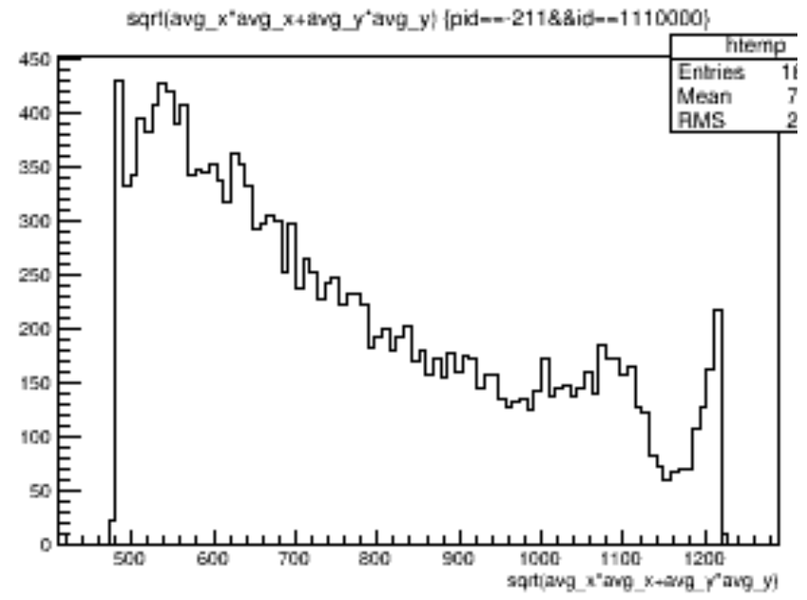
π^- (Hall D) generator, full apparatus, π^- radial dist. in GEMs

More1 baffles

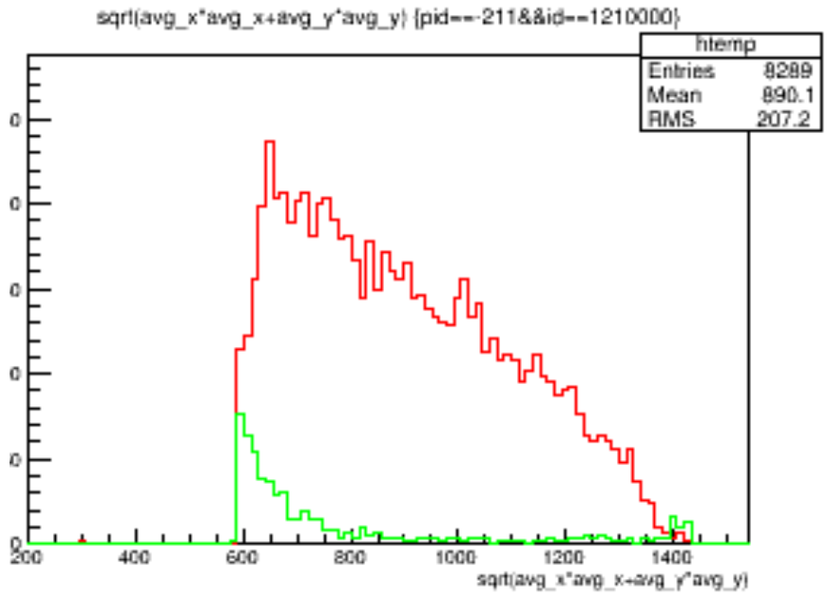
CLEO2 baffles

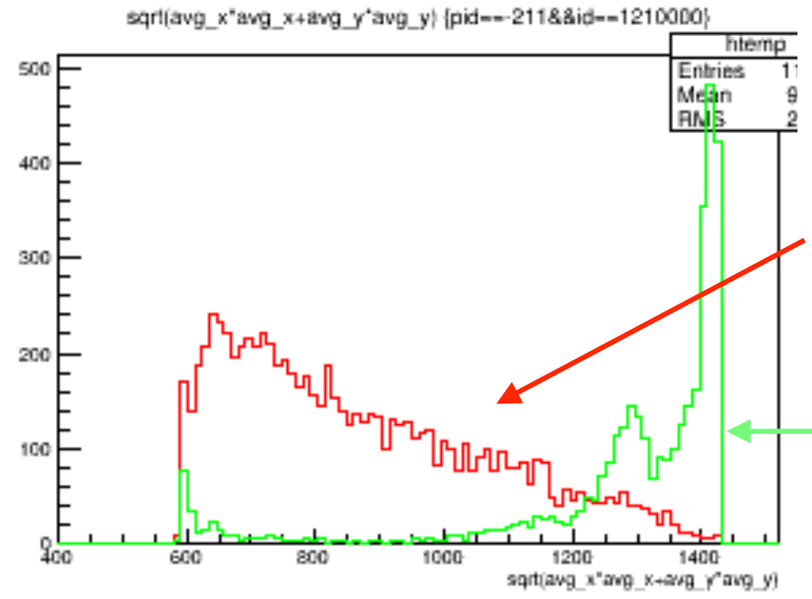
GEM1





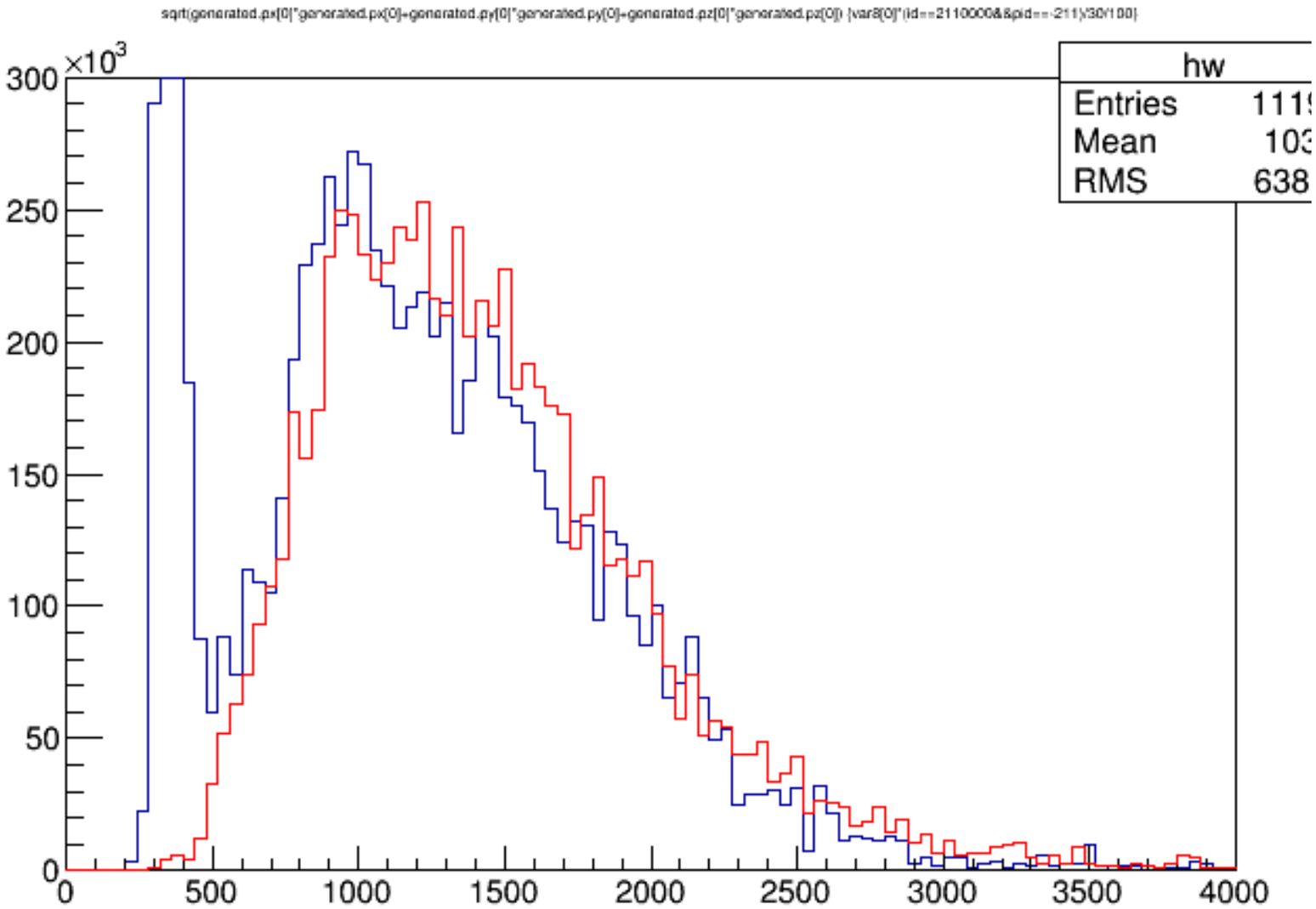
GEM2





Low momentum pions hit downstream baffles and enter GEMs — absence in More1 run due to presence of neutron shielding.

Rates into LGC



More1

CLEO2

- CLEO2 and More1 have similar e^- acceptance (within few %)
- Similar neutrals acceptance
- Similar π^- rate
- CLEO2: Better acceptance at ends of target
- Optimization has yielded little improvement — but we can now say we've designed baffles to the actual magnet.