

PVDIS Progress and Plans

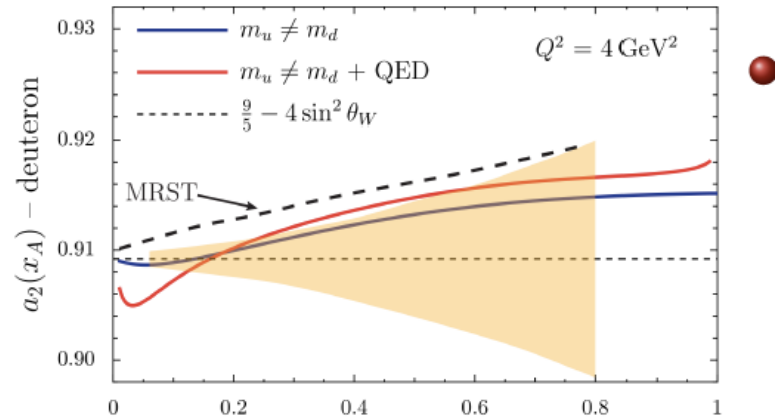
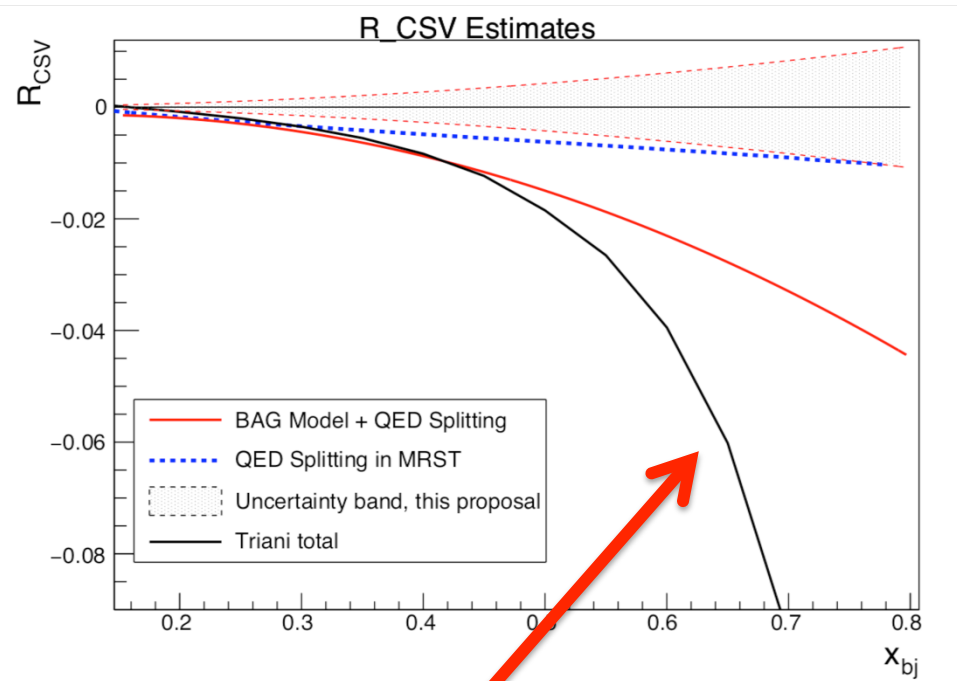
Outline

- Physics case
- LGC backgrounds
- Alignment with X-rays

Physics case

- BSM Physics: work with Jens and Xiaochao
- CSV next slide
- d/u Wally will make now plot

Found new Model with large CSV



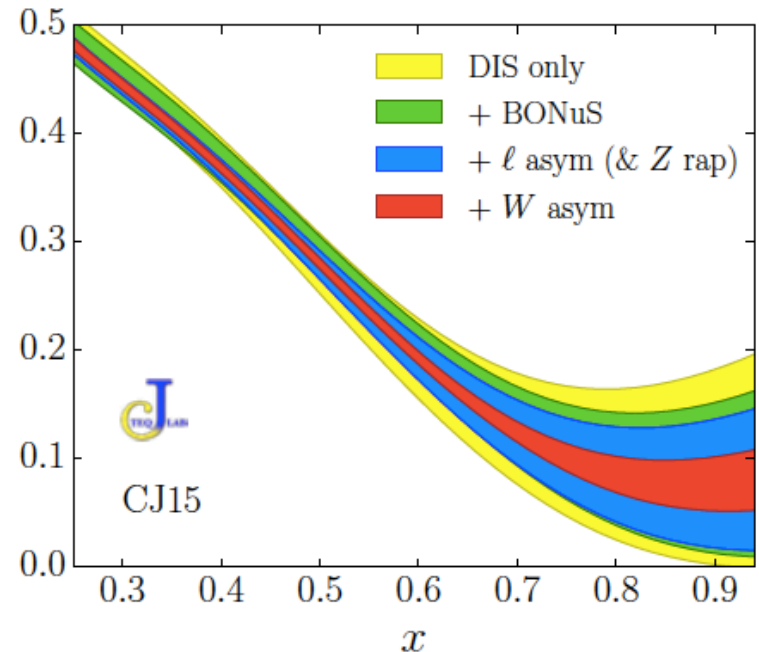
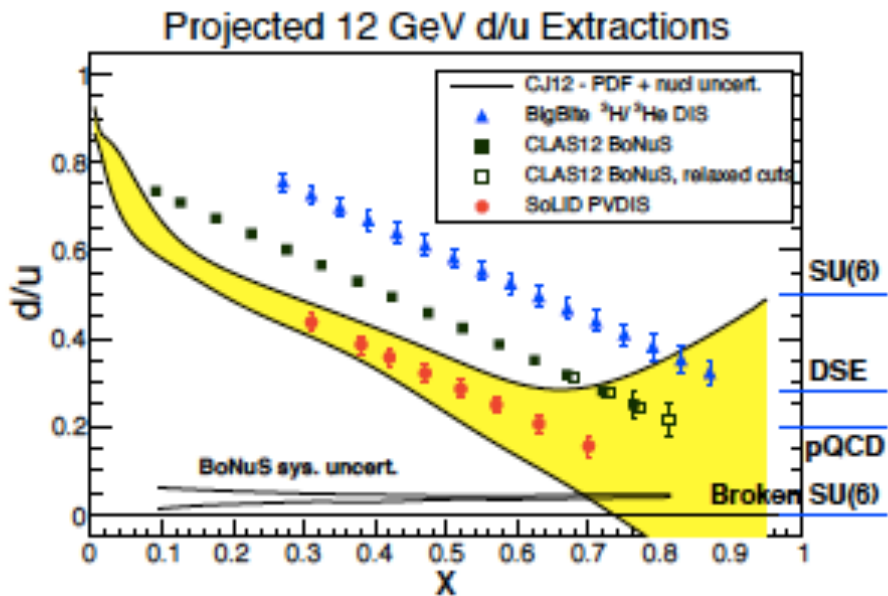
Cloet (small prediction)

Big effect predicted

d/u

pCDR

Recent Fit



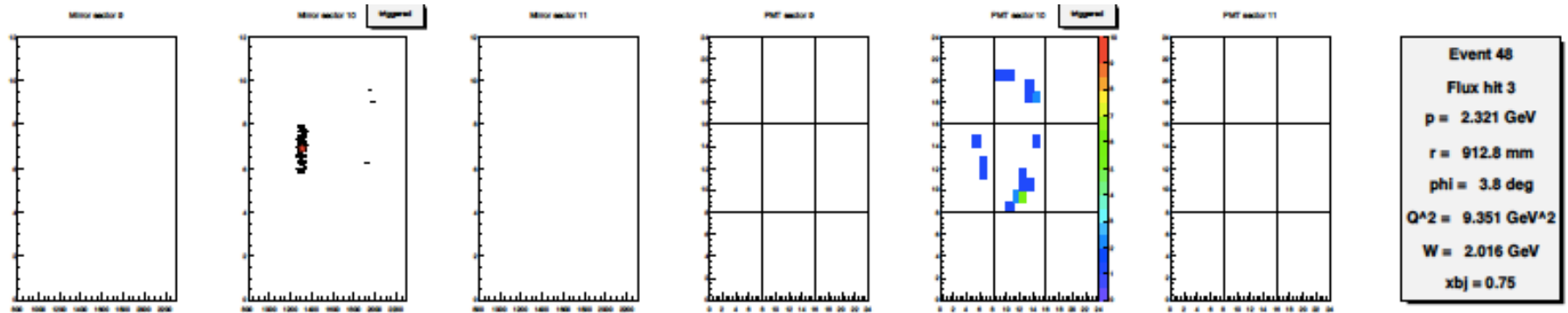
Need new figure to refine case (Wally),
Different Q^2 from Fermilab, no nucleus

LGC Background

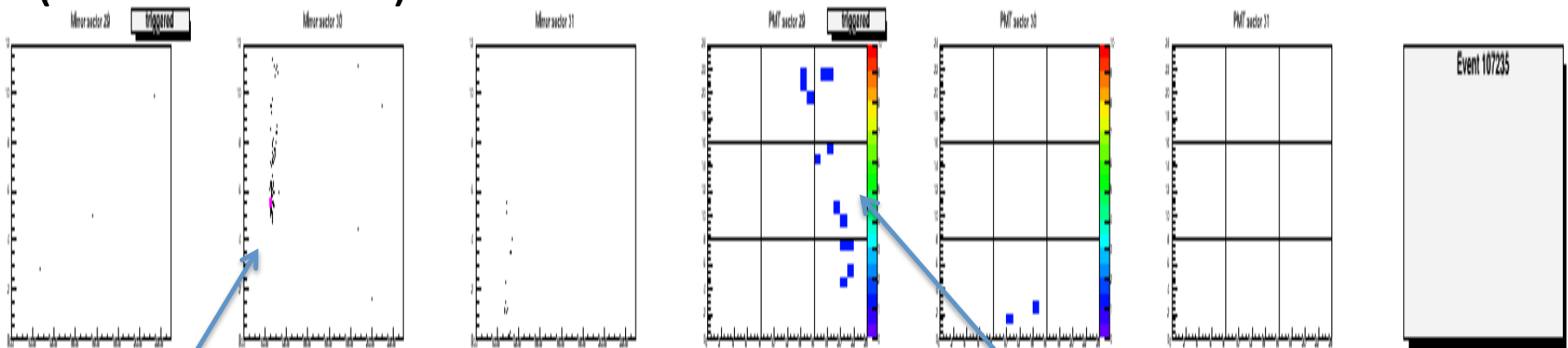
- e^\pm from γ from low Energy π^0
- Asymmetry from hyperons
 - Ye has made progress.
 - Exclusive channels known.

DIS

DIS and π^0 Events in LGC



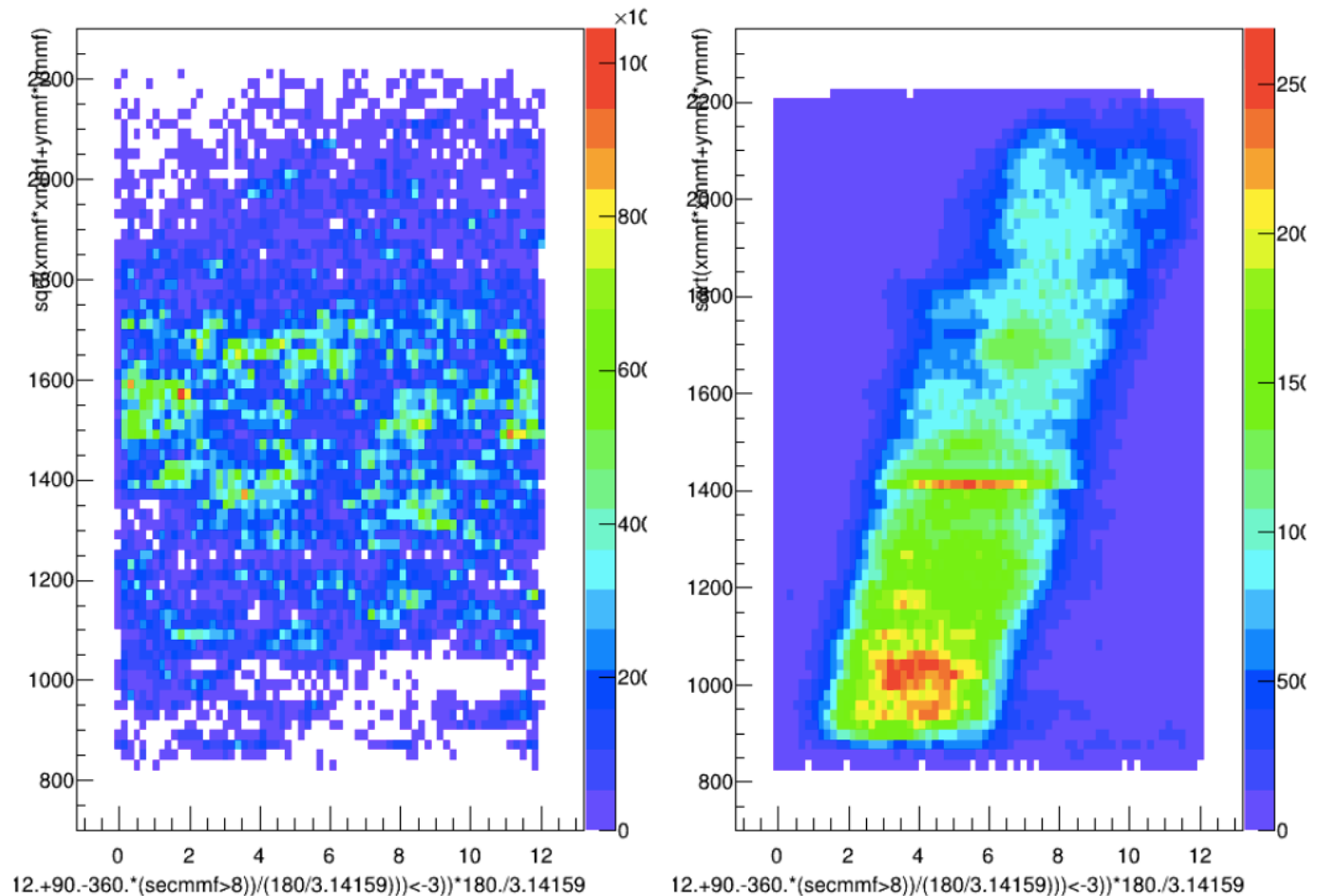
π^0 (~3% Efficient)



Light and track hit one sector

PMT in another sector hit

LGC Triggers from π^0

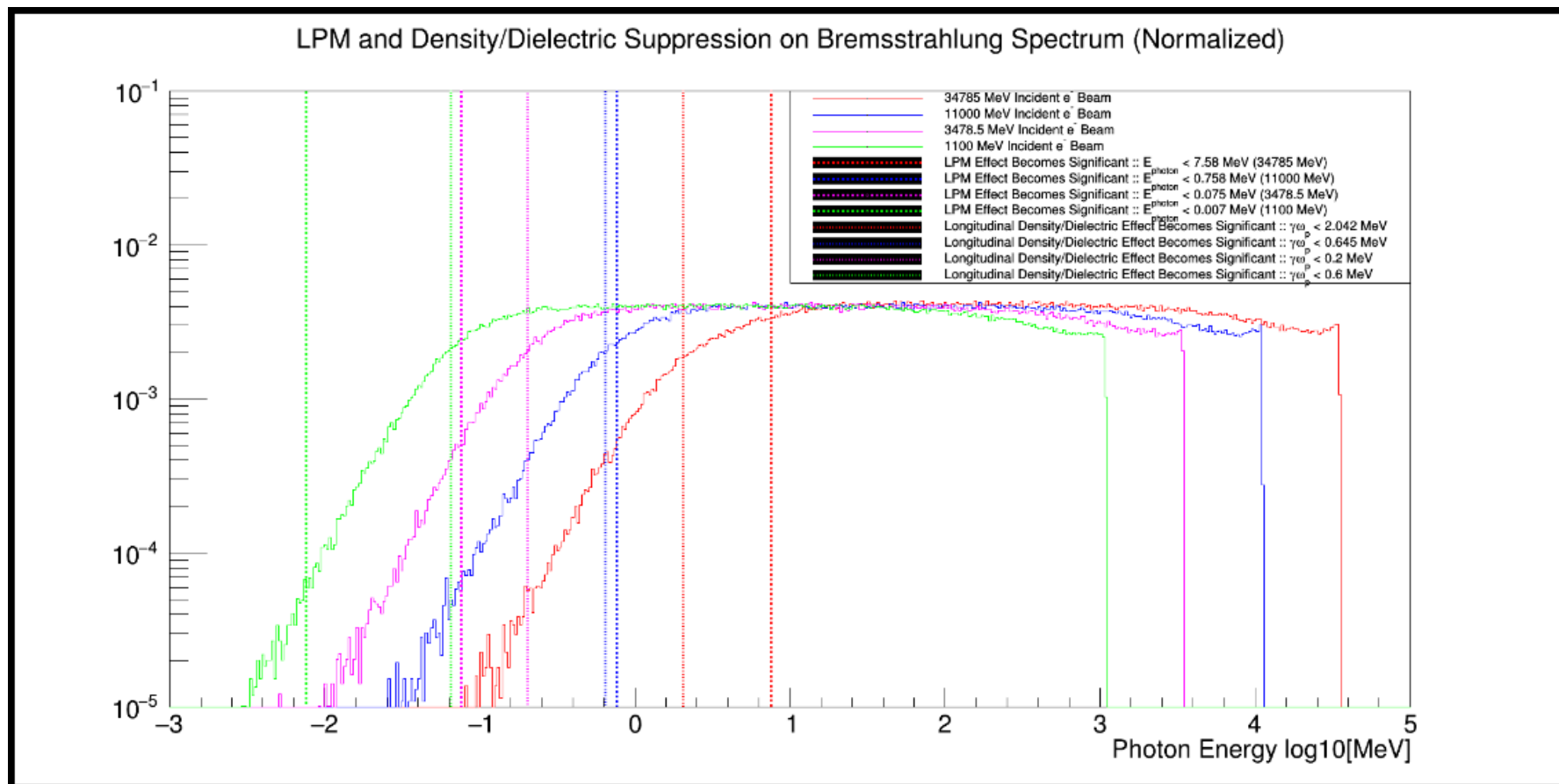


π^0

DIS

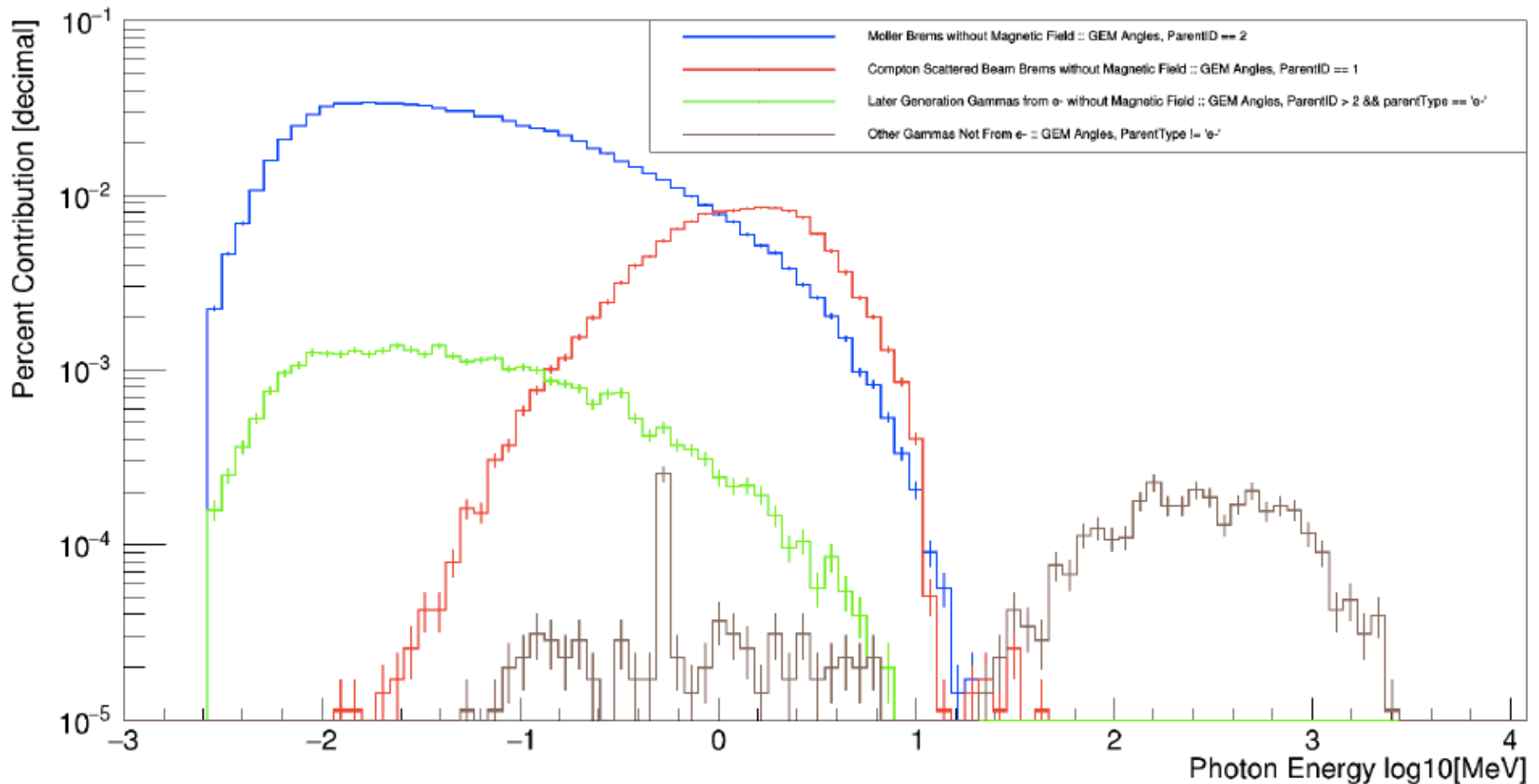
Can we calibrate GEM's with holes in a
1 cm thick piece of Pb?

Energy distribution of Beam Brems from a thin C target



Source of GEM Photons From C

Photon Sources (Without Magnetic Field) :: GEM Angles (17° - 37°)



Photon-induced signals in GEM's

Energy Deposited vs. Track Length (Photon Initial Energy: ALL)

