

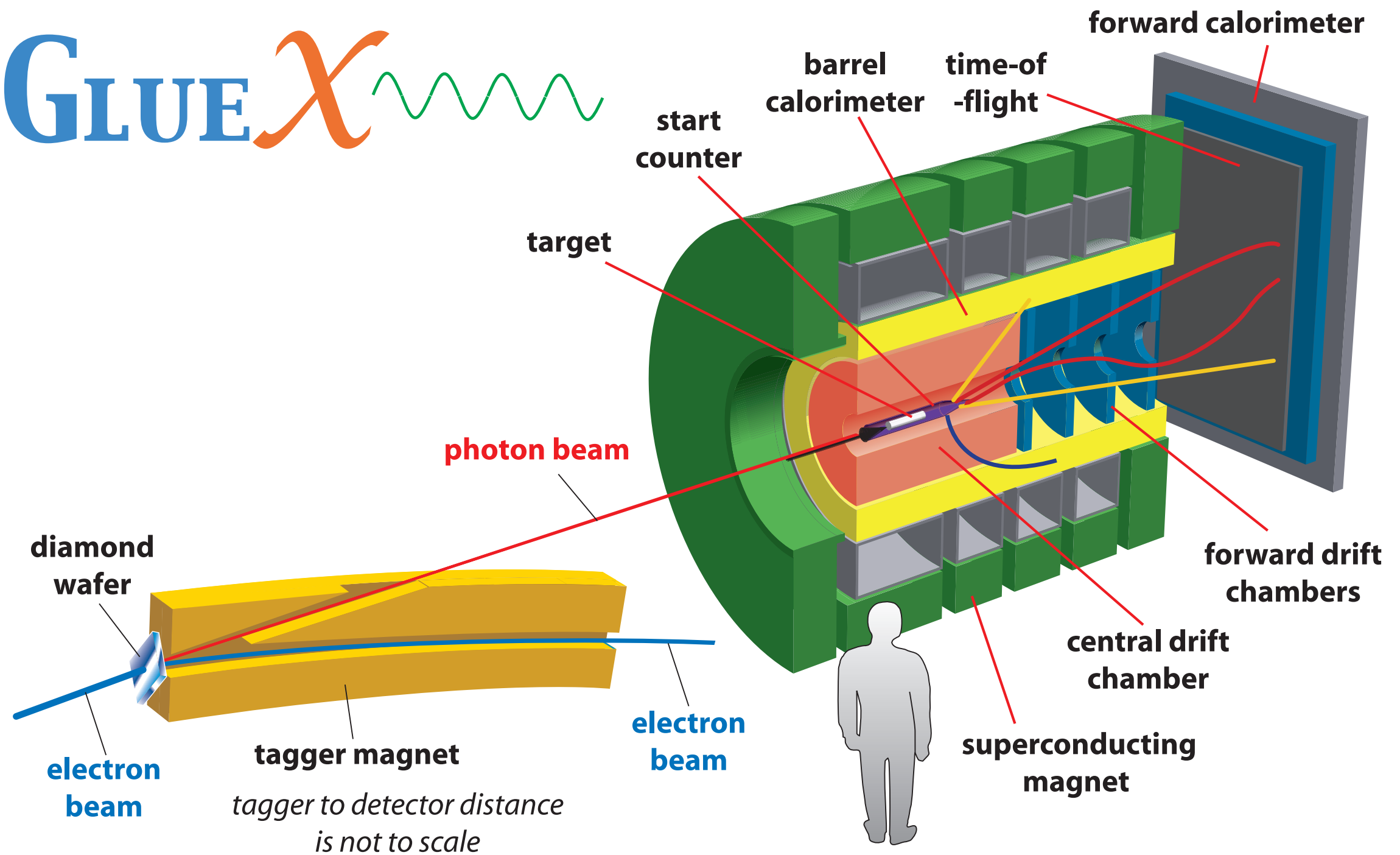
J/ ψ in Hall D

Justin Stevens
for GlueX di-lepton WG

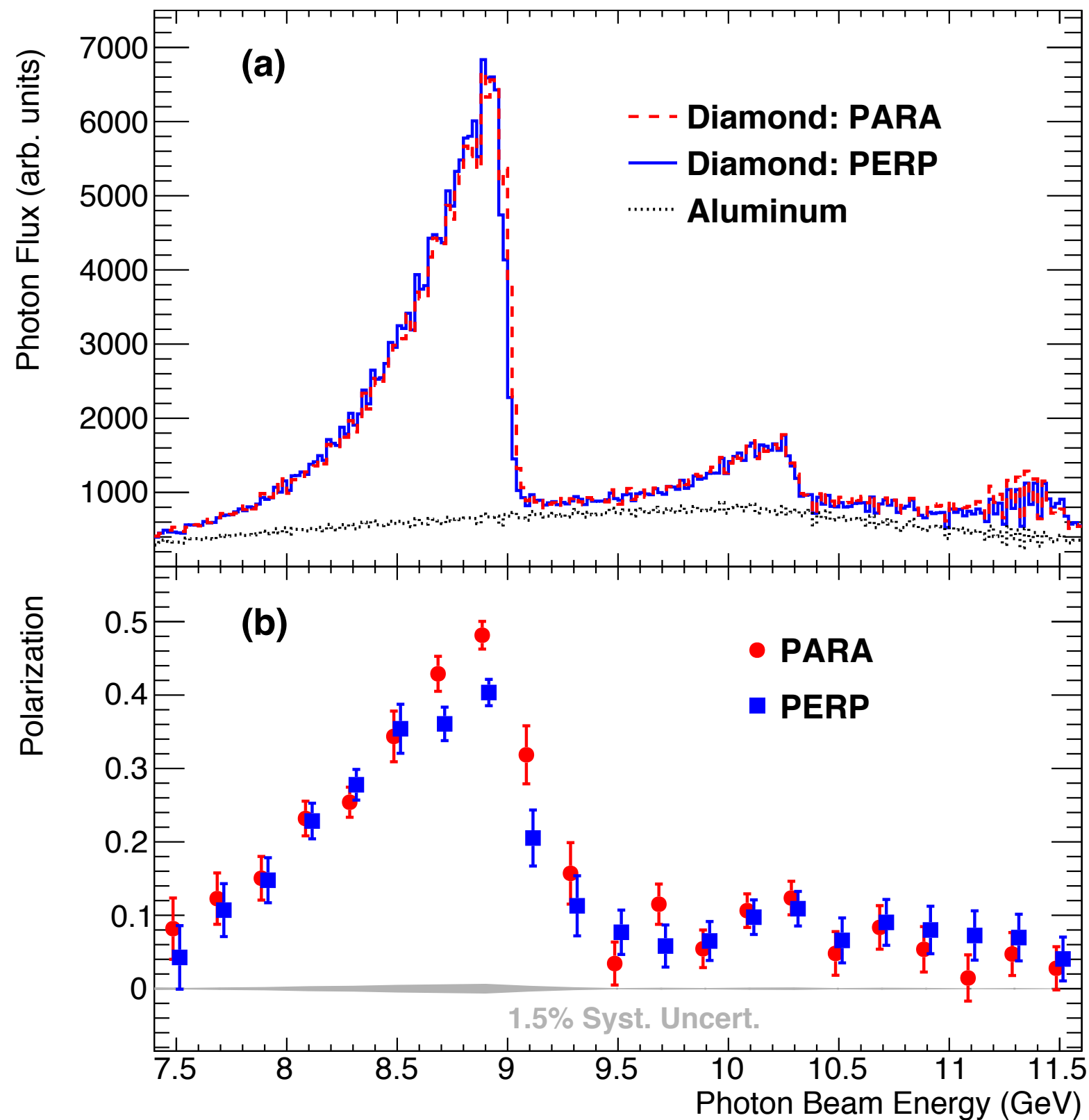


WILLIAM & MARY
CHARTERED 1693

GLUE χ

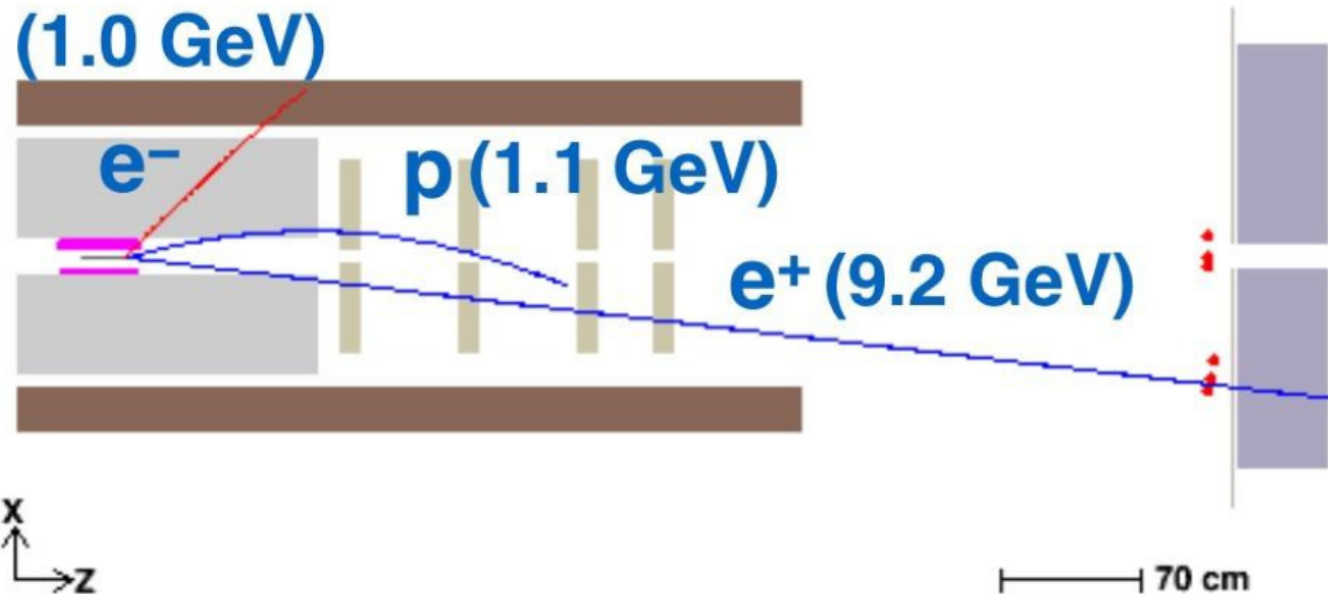


Spring 2016 engineering run

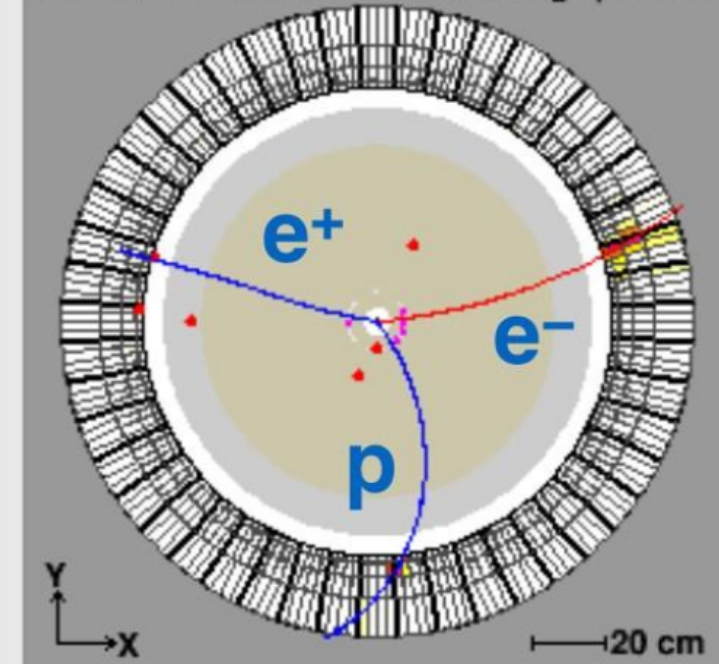


Exclusive reconstruction of tagged γ and e^+e^-p

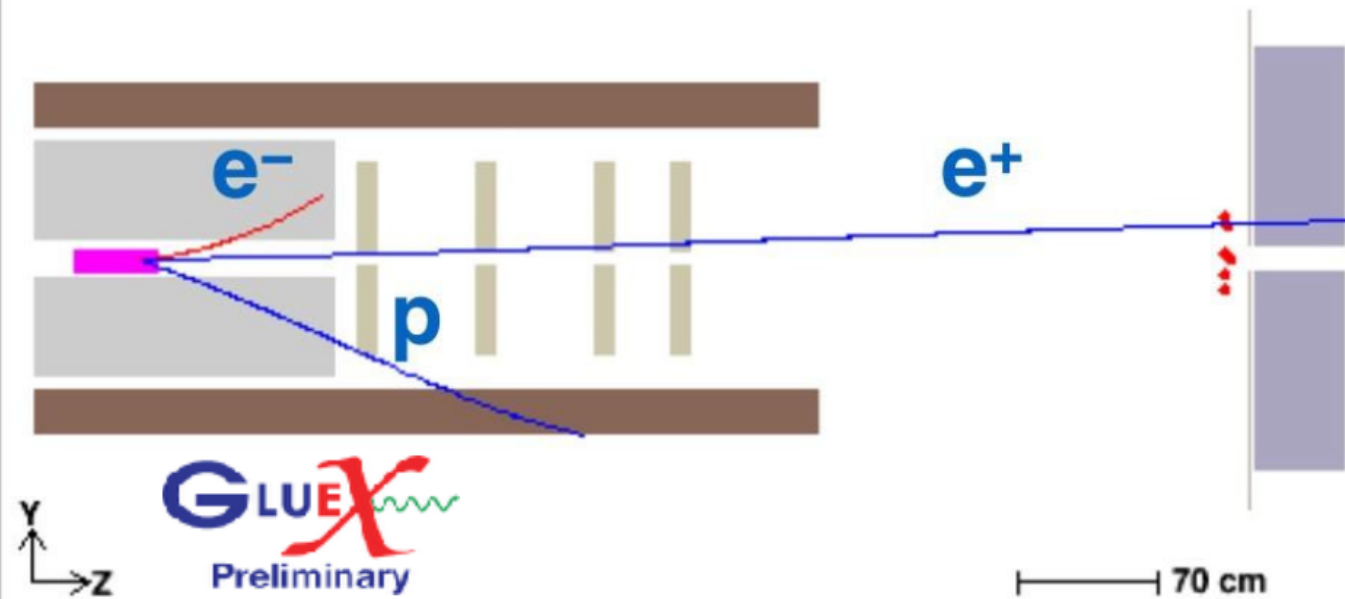
top view (looking down from above detector)



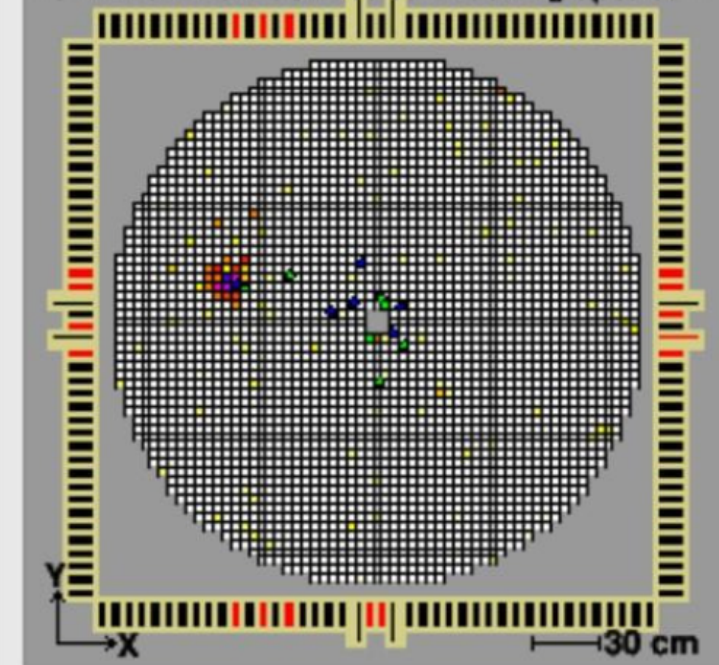
BCAL view from downstream looking upstream



side view from beam right (south)

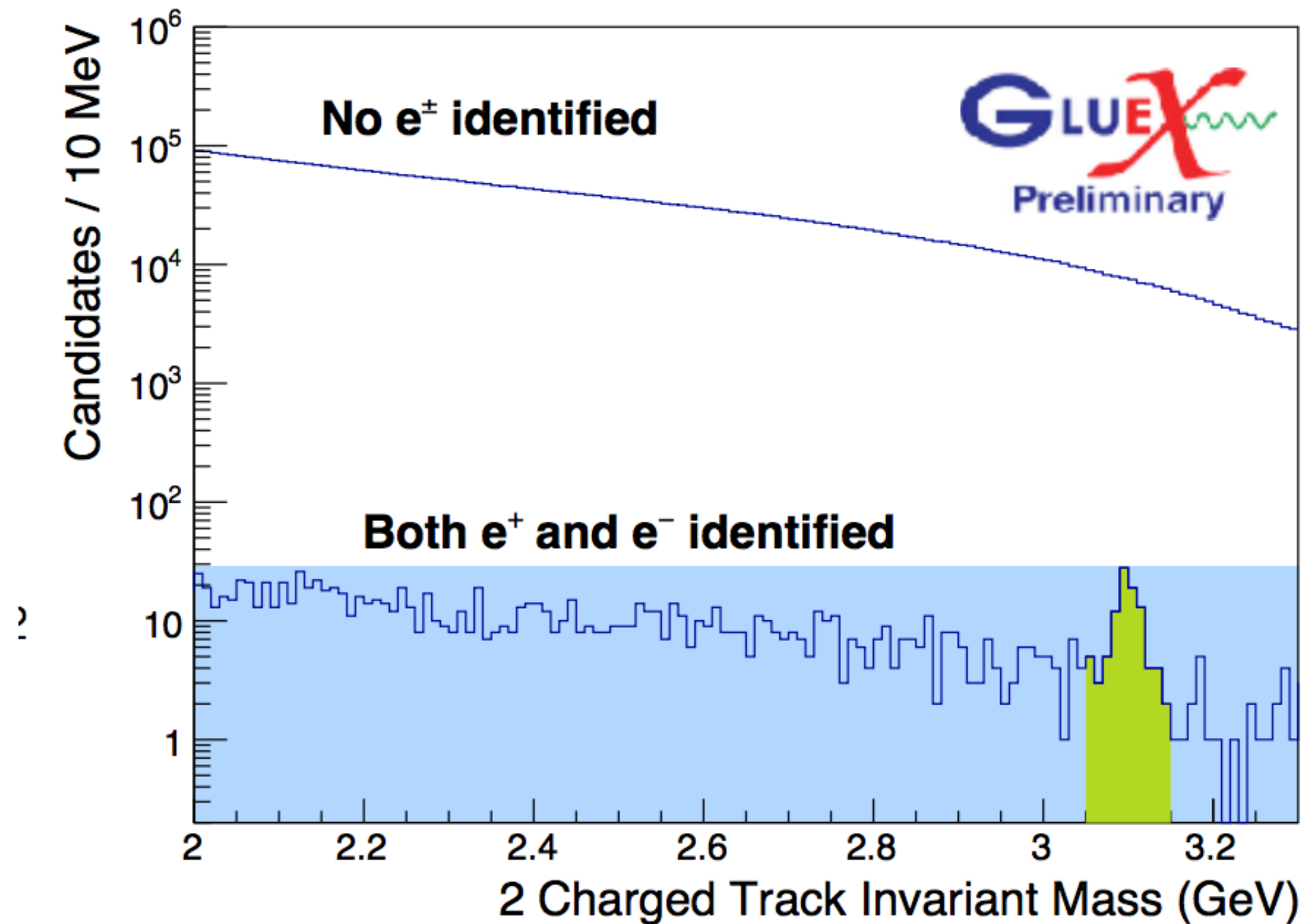


FCAL view from downstream looking upstream



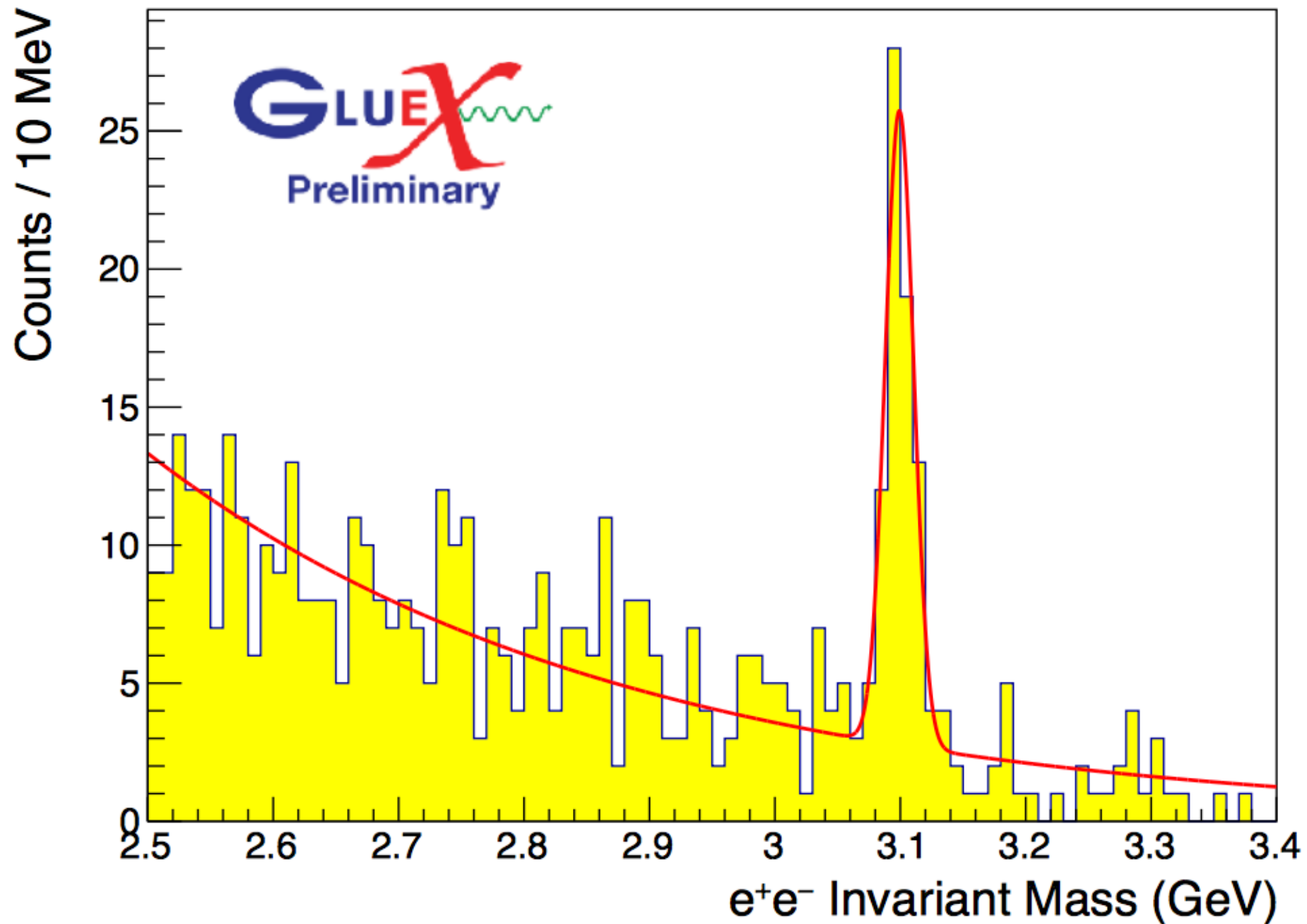
Northwestern: Sean Dobbs, Luke Robison, Kam Seth
JLab: Lubomir Pentchev

First observation of charm at JLab



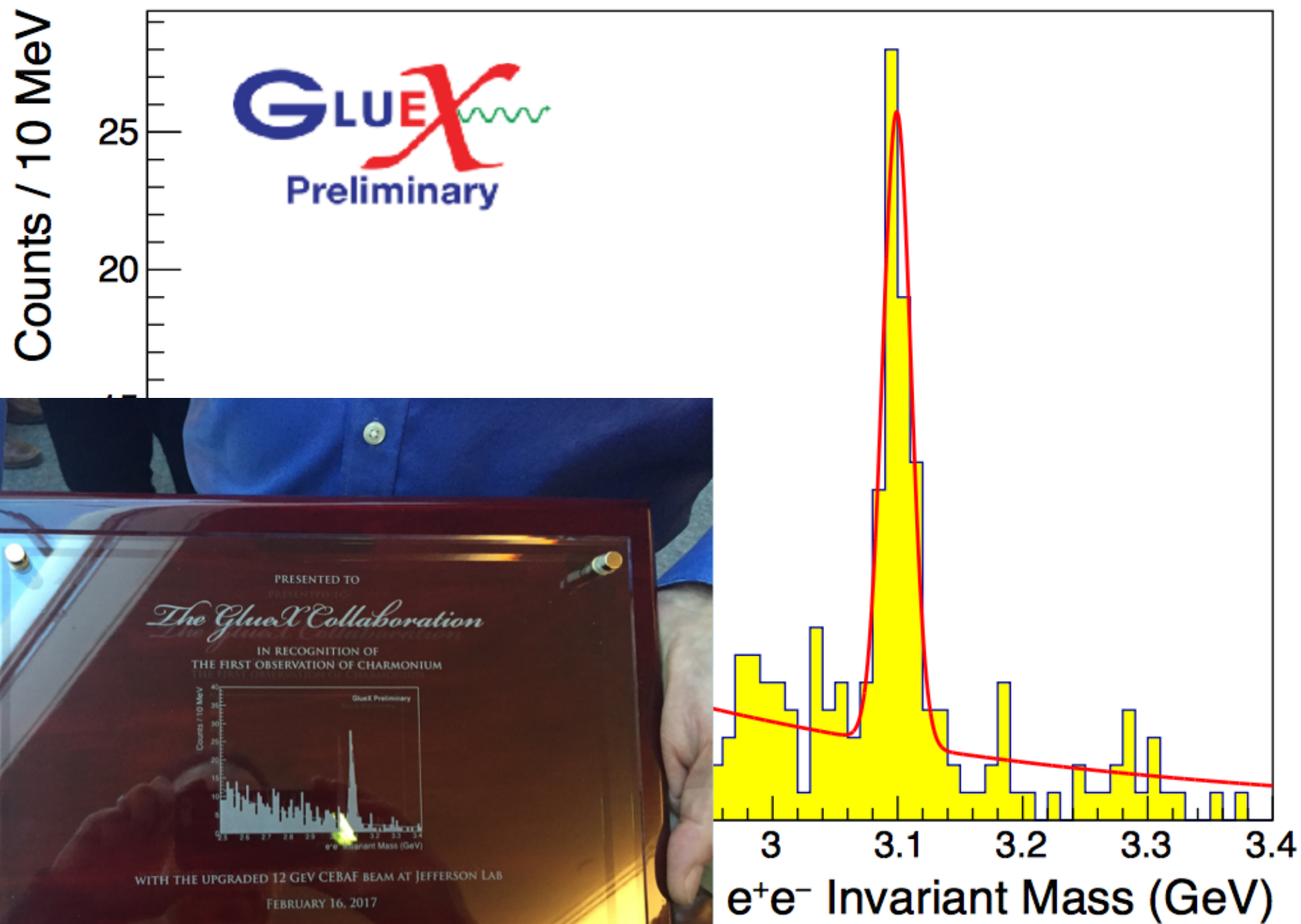
Presented at DNP 2016 in Vancouver

First observation of charm at JLab



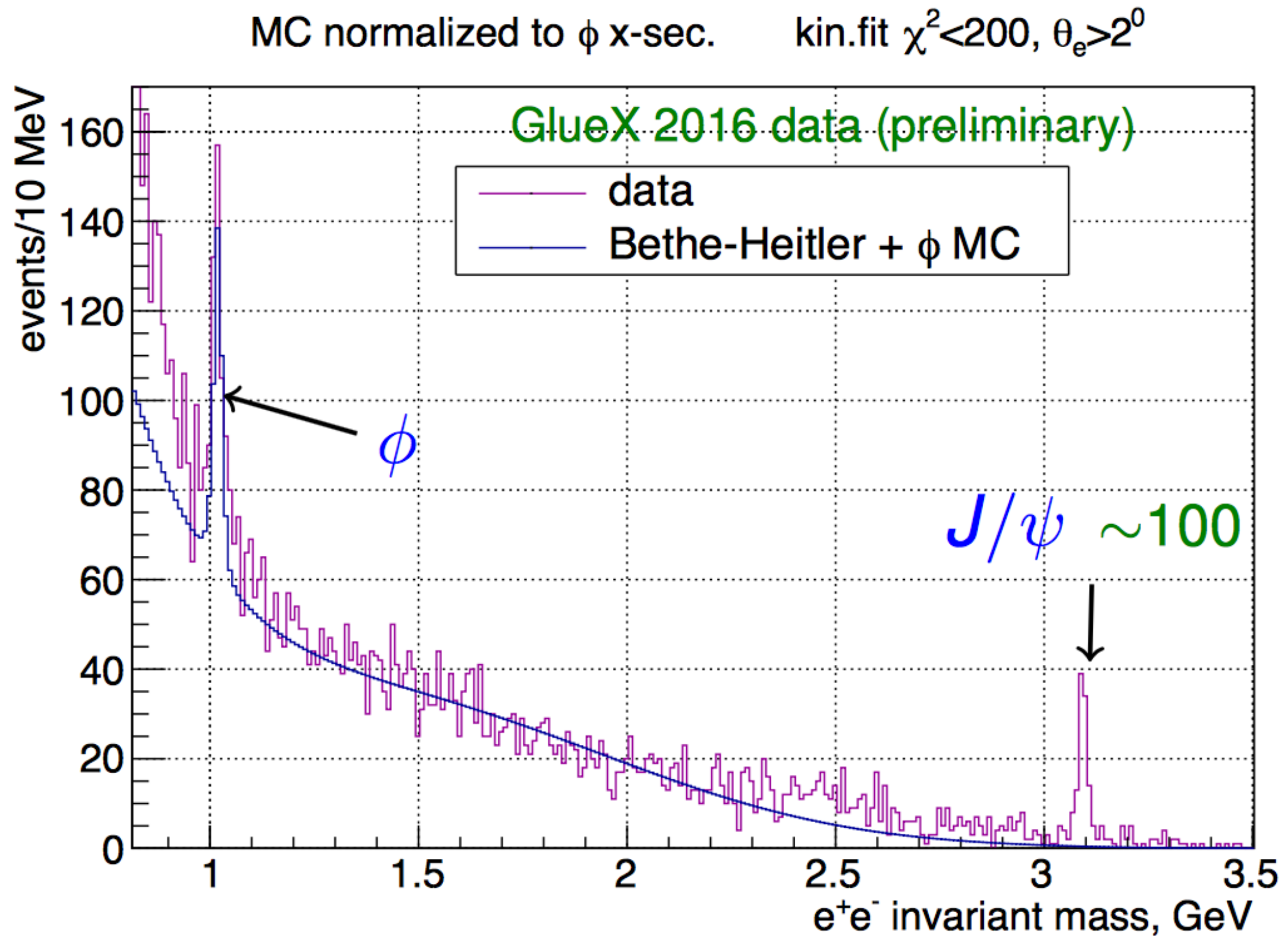
Presented at DNP 2016 in Vancouver

First observation of charm at JLab

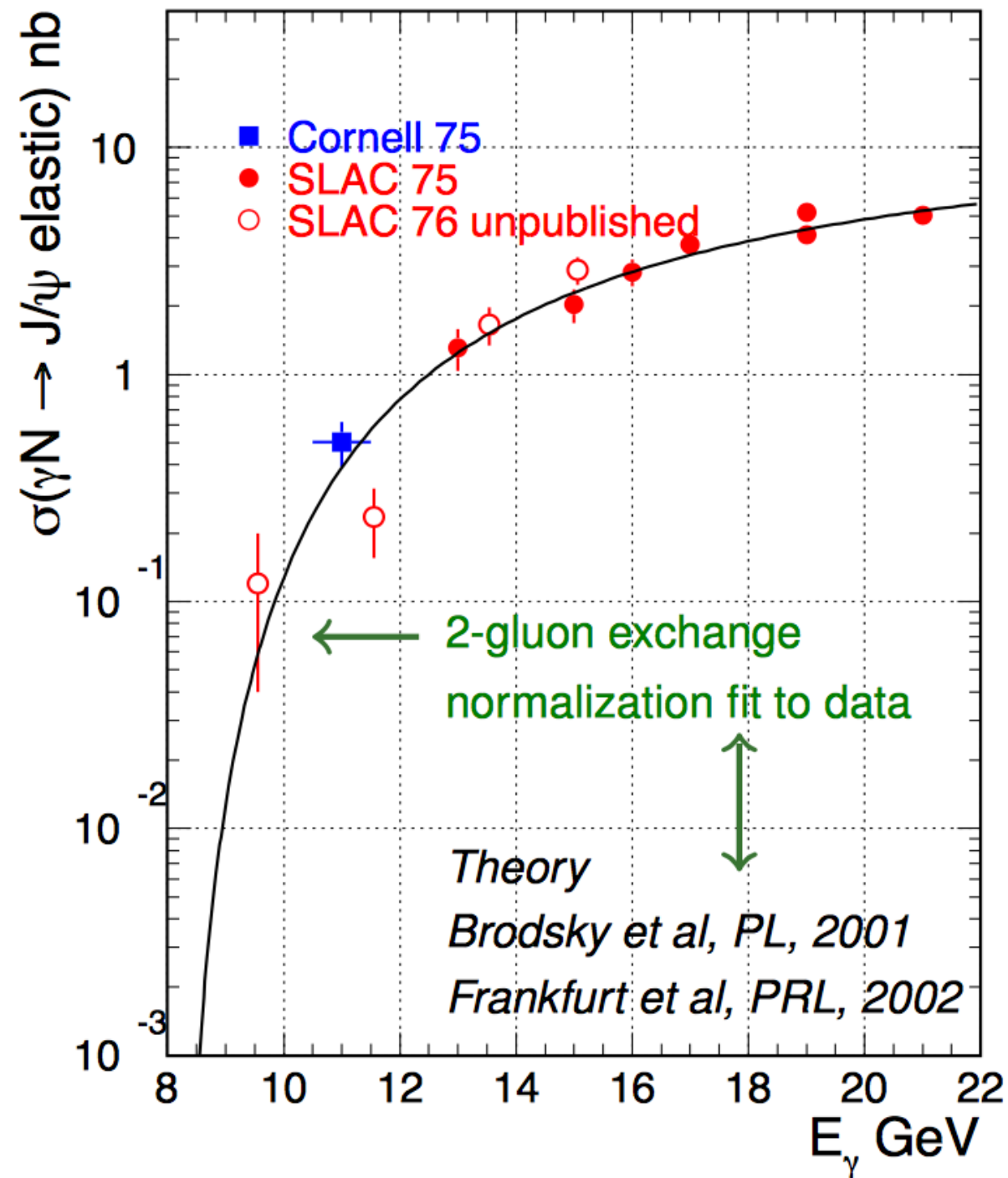


2016 in Vancouver

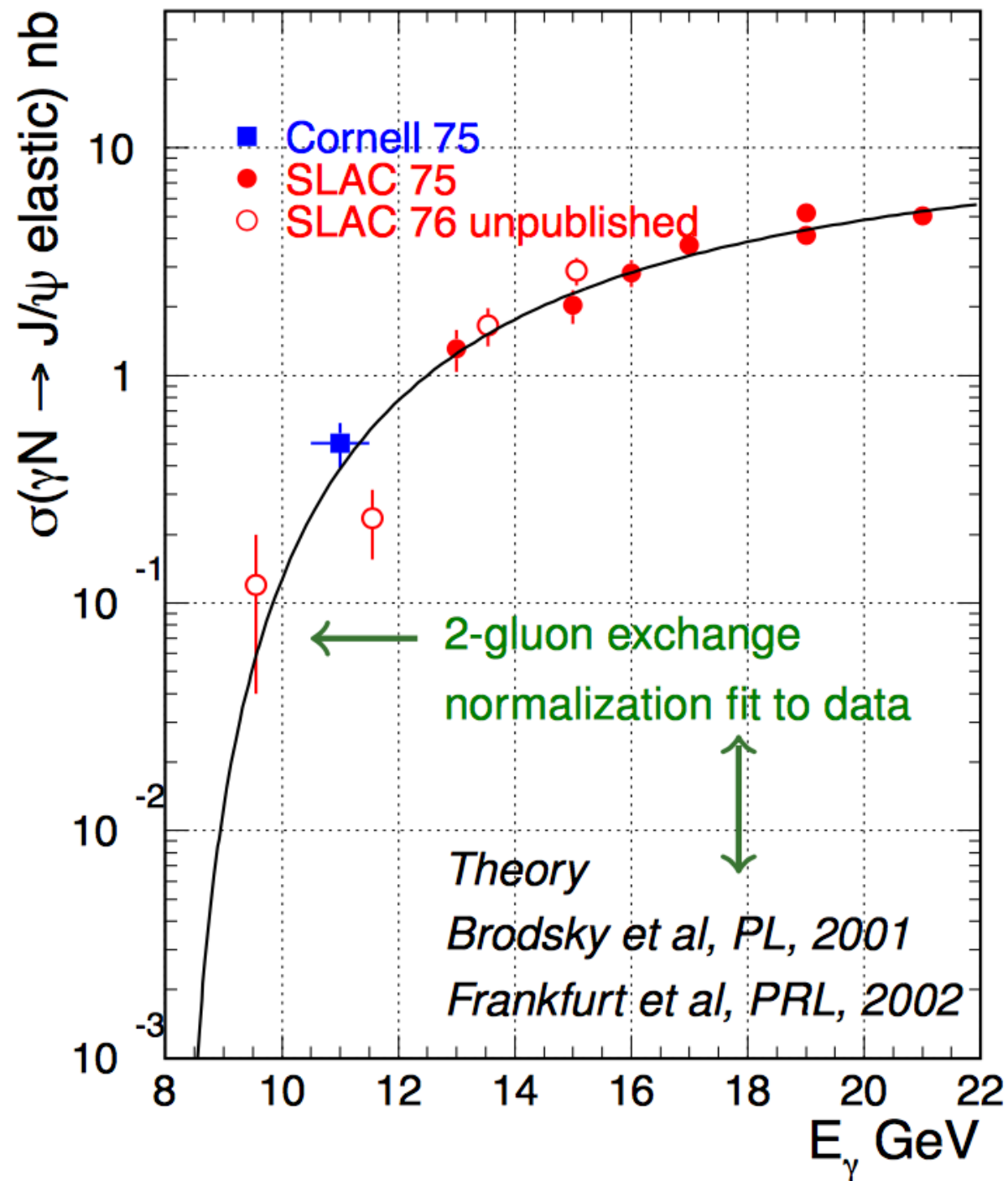
Comparison to MC



Preliminary Energy Dependence

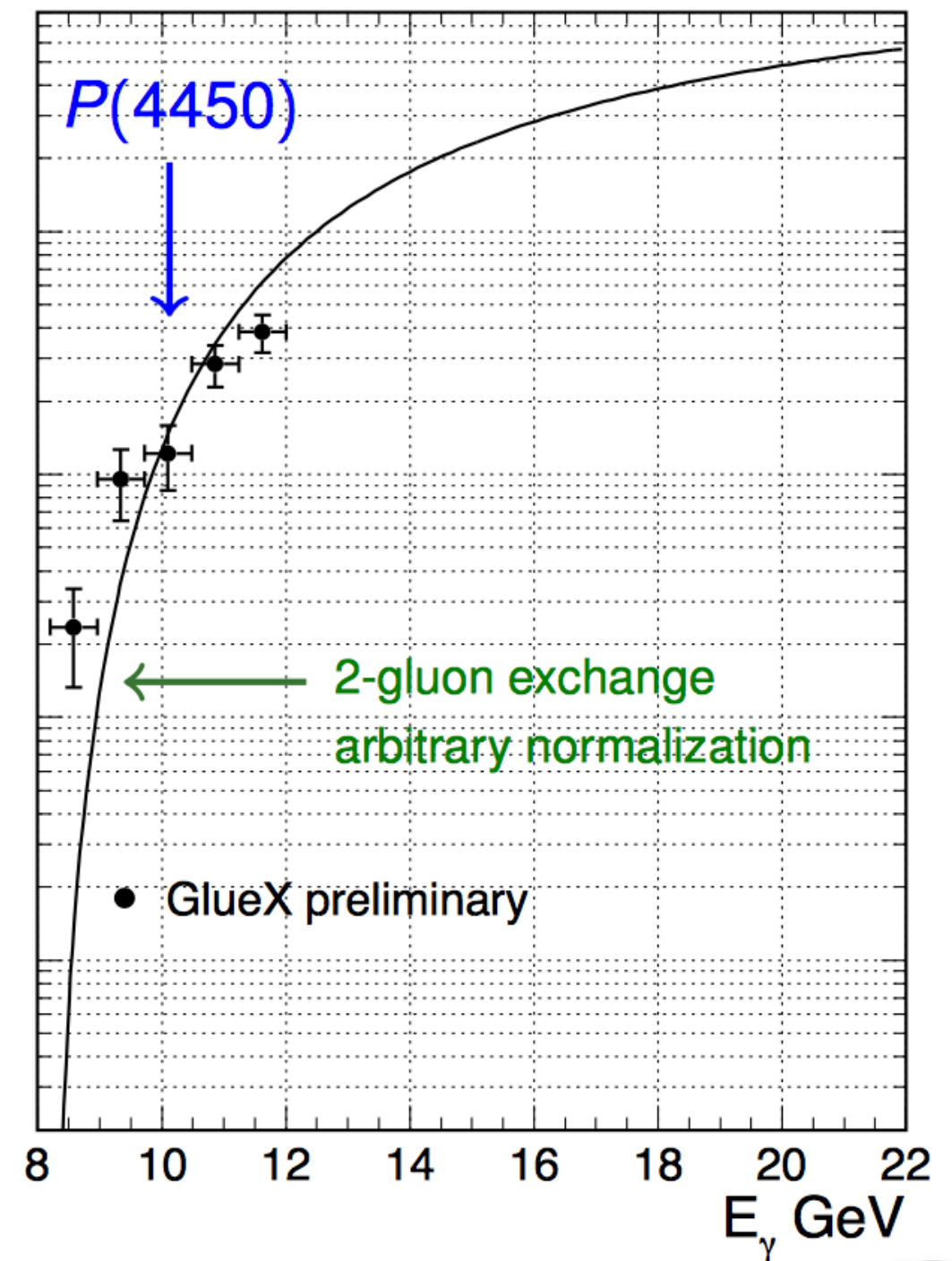


Preliminary Energy Dependence



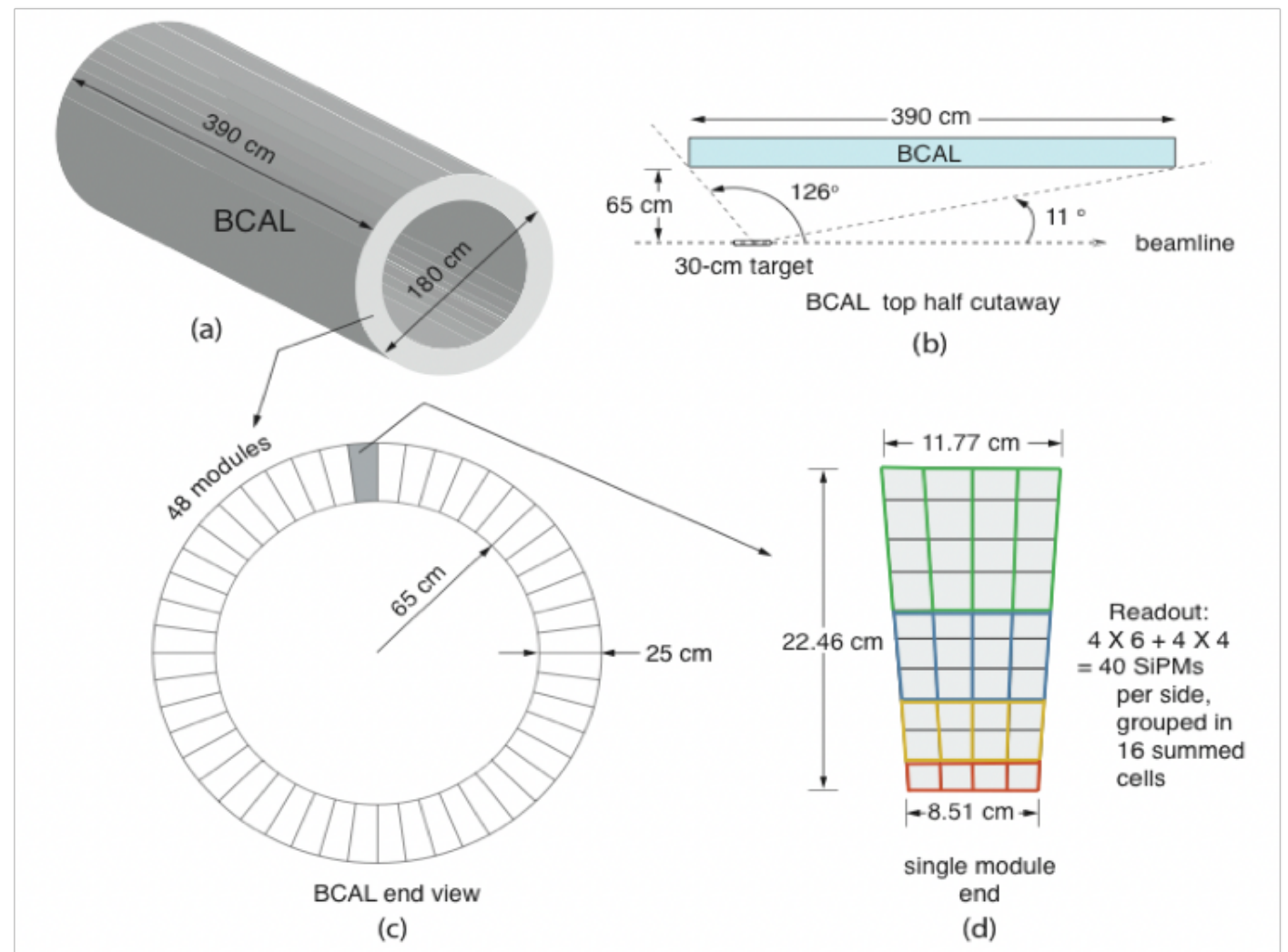
ARBITRARY UNITS

$\sigma(\gamma p \rightarrow J/\psi \text{ elastic})$



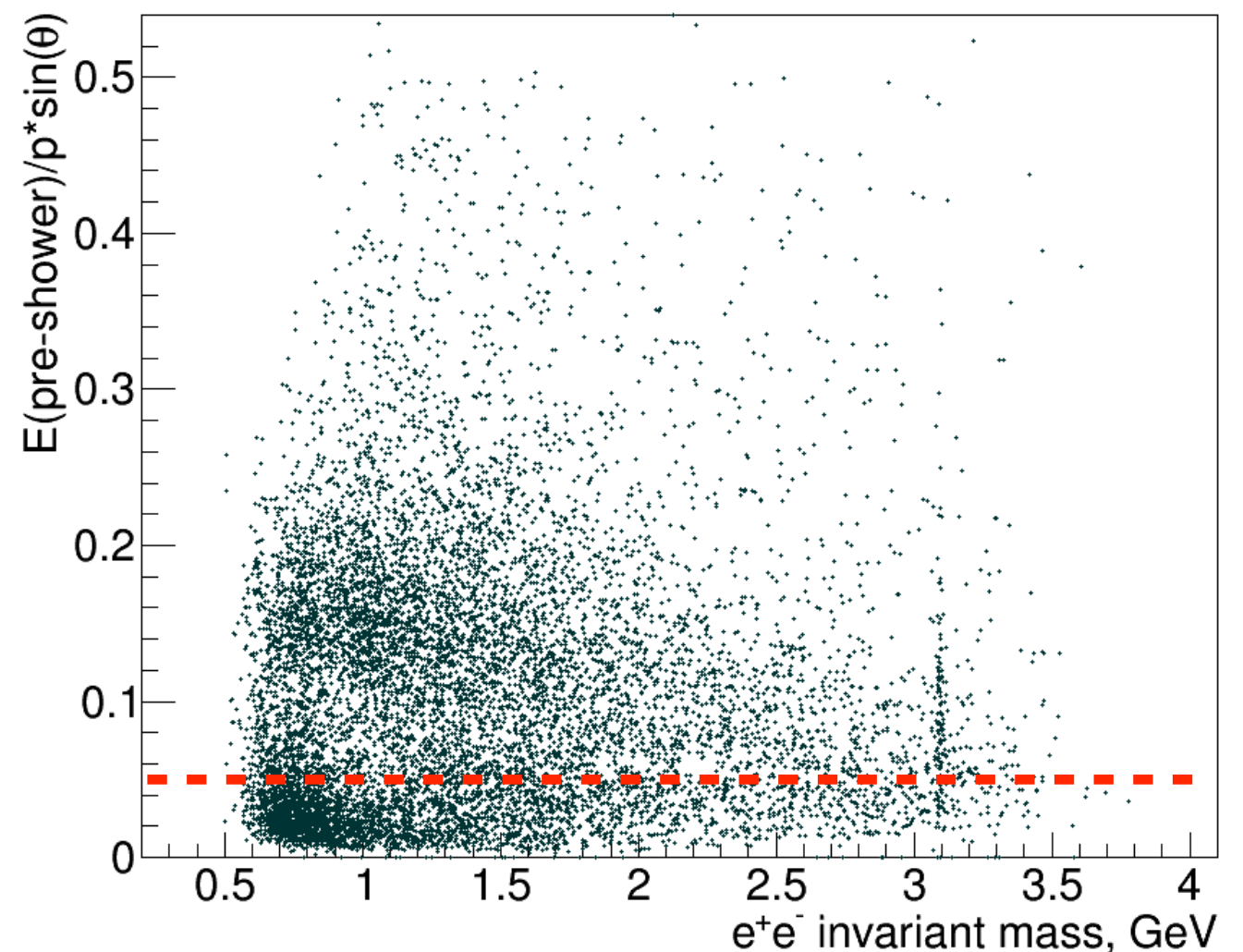
Ongoing studies

- * Efficiency corrections
- * Flux normalization
- * e/π separation
- * BCAL pre-shower
- * Shower width variables
- * Saturation of showers in BCAL ($\sim 5\text{-}6$ GeV)
- * Understanding continuum background for TCS studies

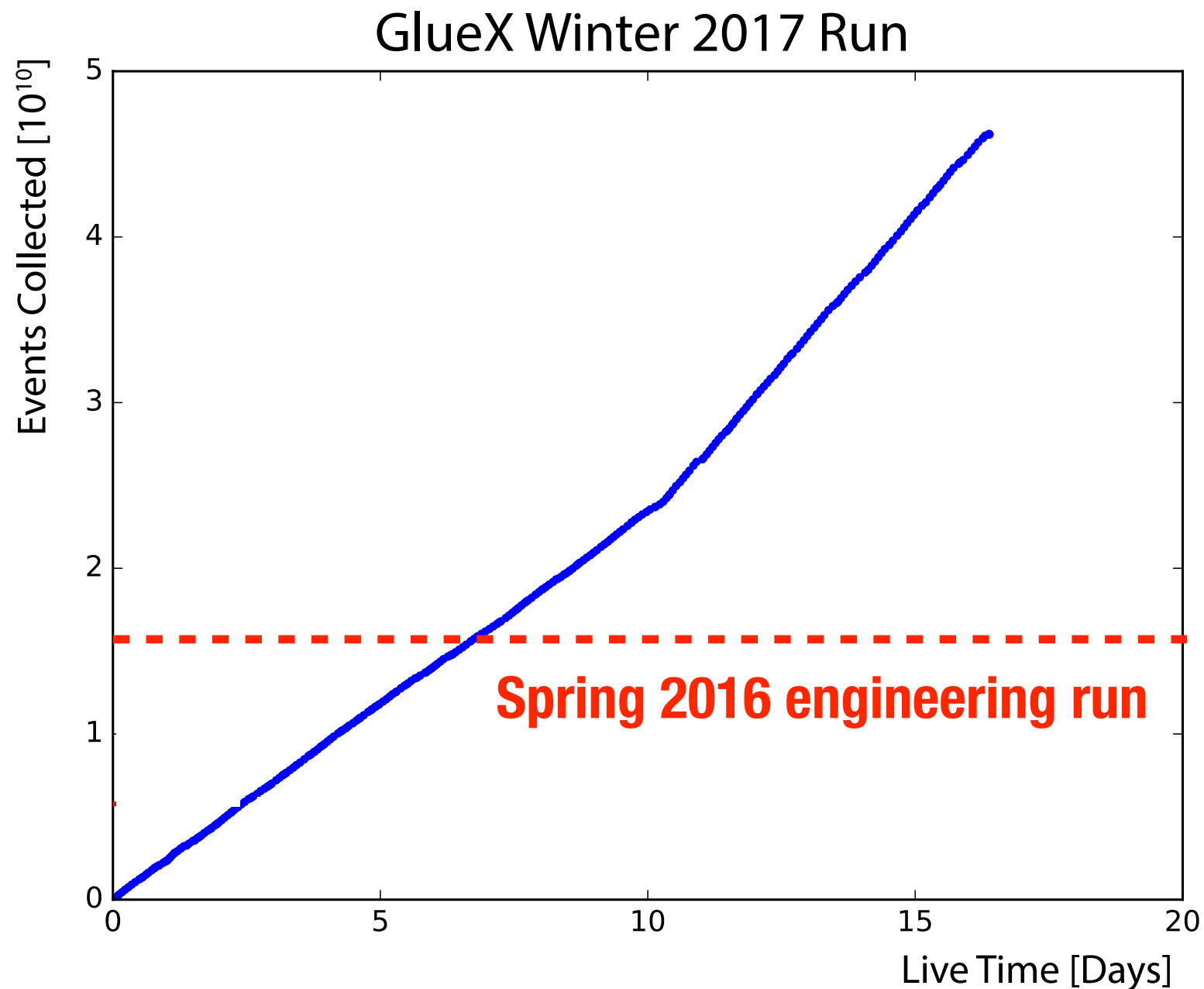


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- * Efficiency corrections
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- * Understanding M_{ee} continuum for TCS studies



Outlook



- * ~3x more data on tape from Spring 2017
- * Cross section as a function of E_γ and t -slope