

Target Dimuon Distribution Comparisons for Roadsets 57, 62, 67

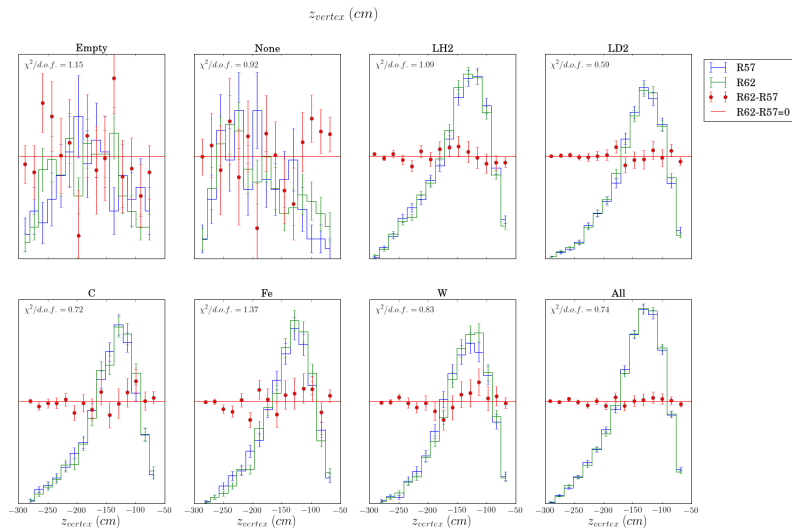
B. Dannowitz

University of Illinois at Urbana-Champaign

October 5, 2015

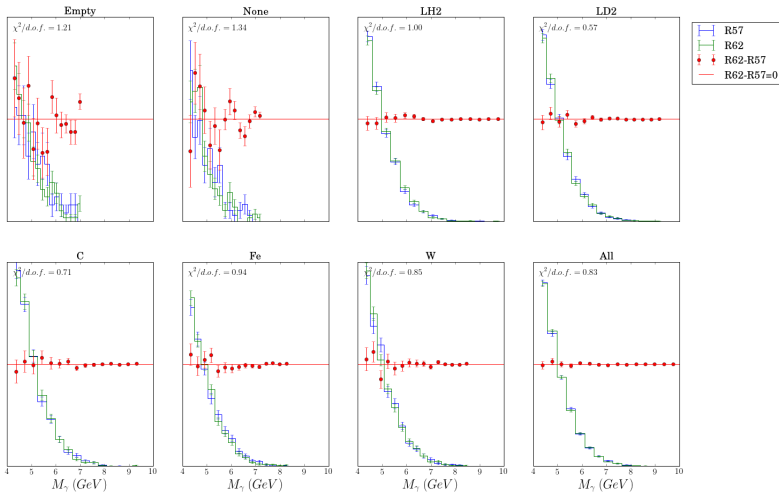
- Good spills only ([DocID #1307](#))
- Valid dimuons only ([DocID #1489](#))
- Target dimuons only ([DocID #1489](#))
- All distributions (in blue and green) are normalized ($\sum bin_width \cdot bin_height = 1$)
- 15 identical bins used for each set of plots
- Residuals (difference of normalized distributions) overlaid in red
- Residuals have the same y-scale, but the y-axis is shifted such that zero (red line) is in the middle of the plot
- $\chi^2/d.o.f.$ calculated with hypothesis that distributions are the same
- No $\chi^2/d.o.f.$ is calculated for G2SEM and liveProton, since there is no reason to expect them to be the same

z_{vertex}



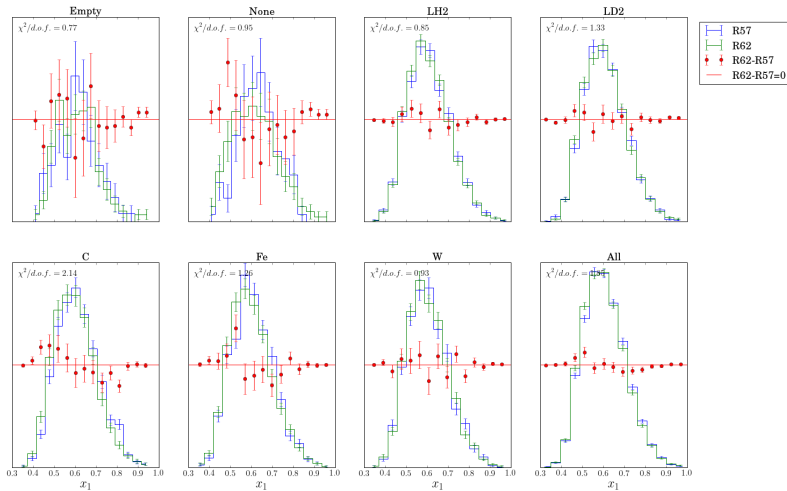
mass

M_γ (GeV)



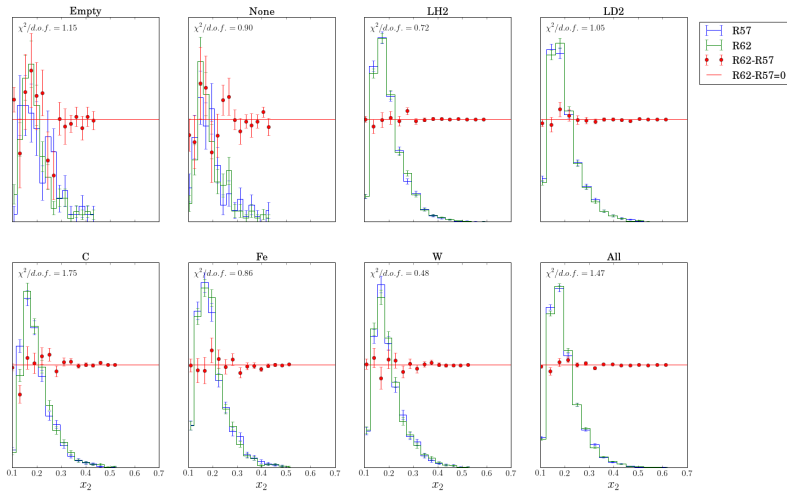
x_1

x_1



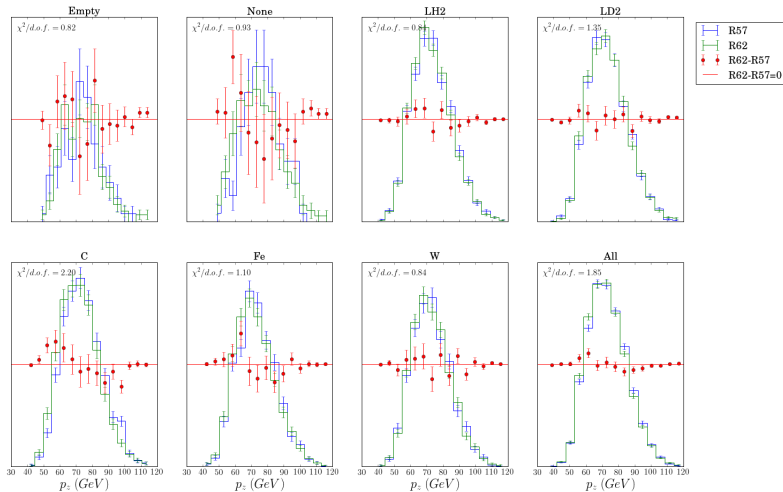
x_2

x_2



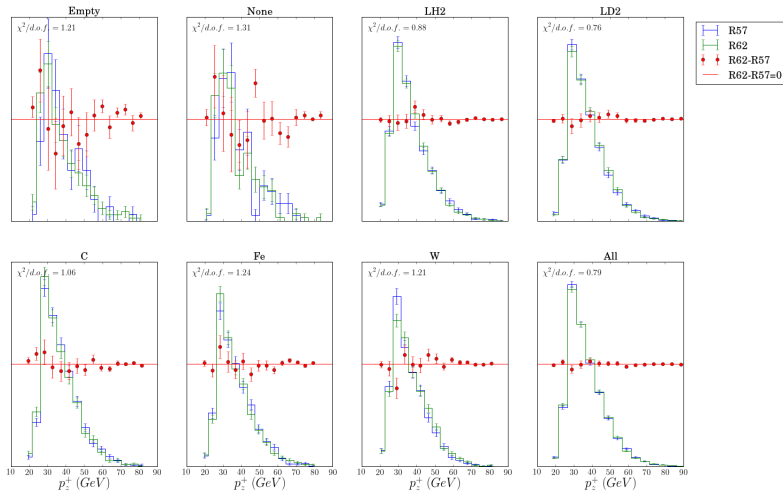
p_z

p_z (GeV)



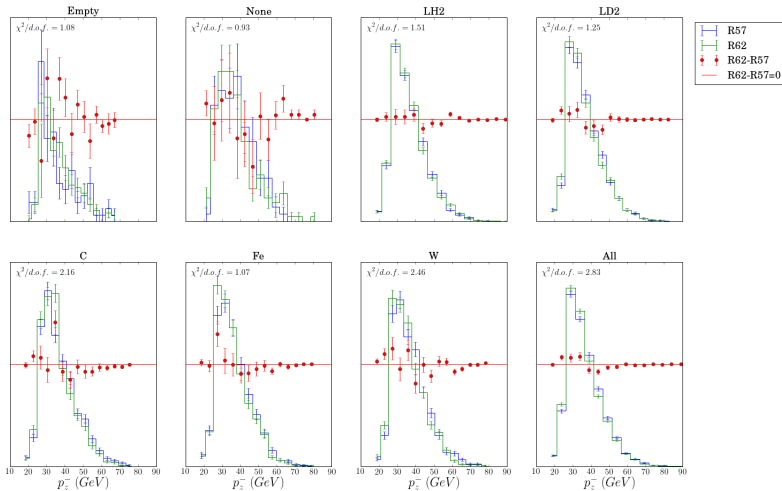
p_z^+

$p_z^+ \text{ (GeV)}$



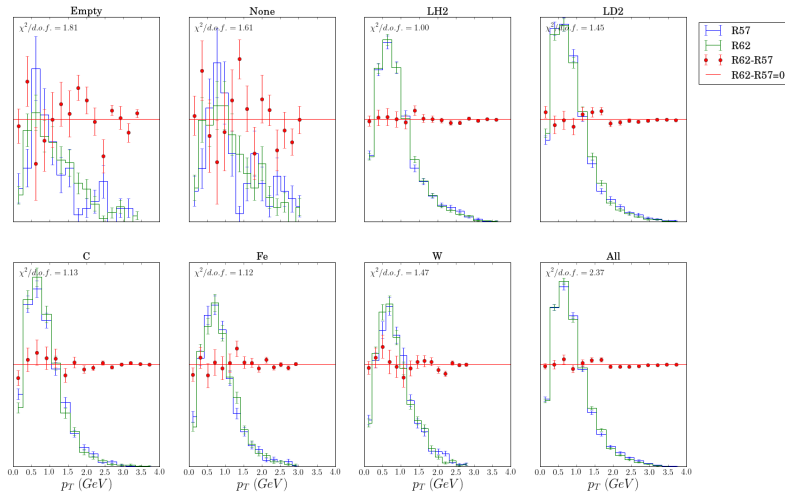
p_z^-

p_z^- (GeV)



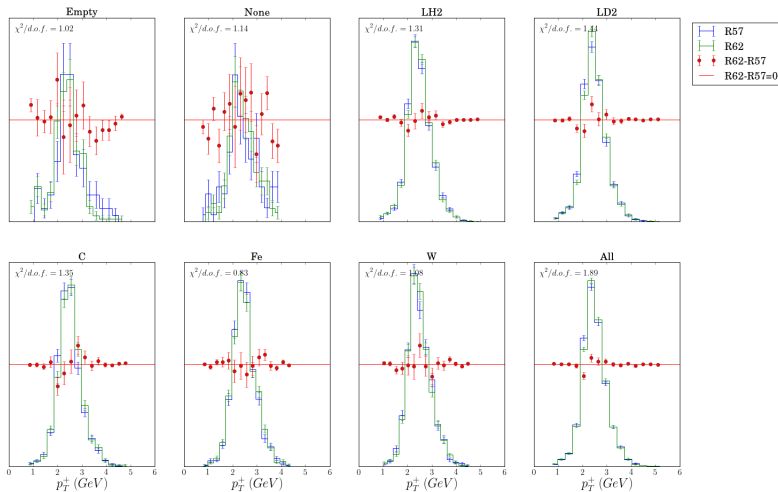
p_T

p_T (GeV)



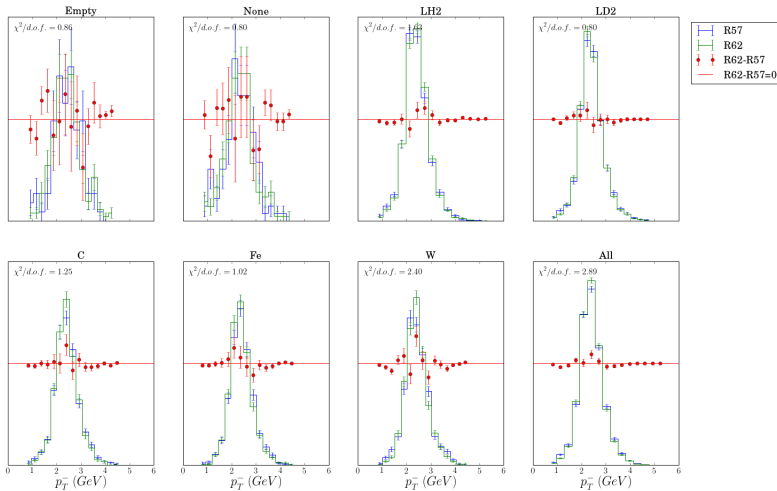
p_T^+

$p_T^+ \text{ (GeV)}$



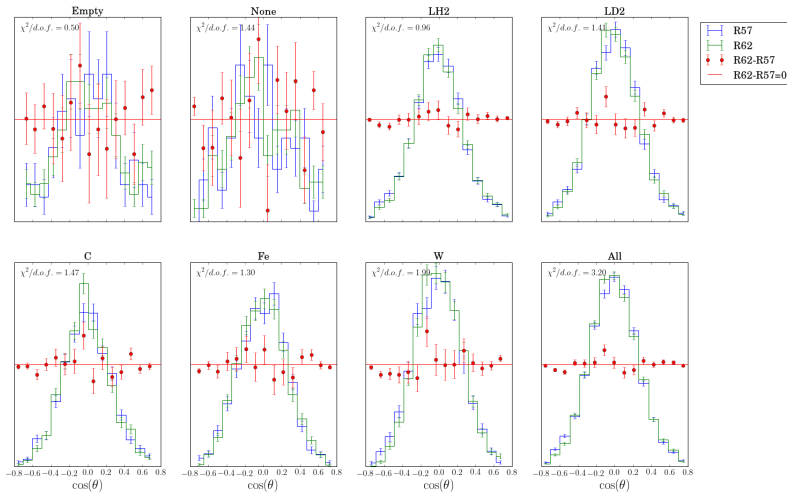
p_T^-

p_T^- (GeV)



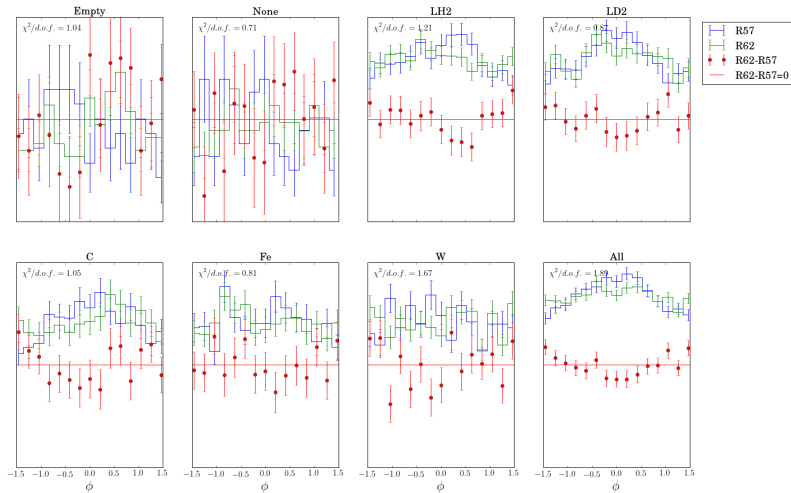
$\cos(\theta)$

$\cos(\theta)$



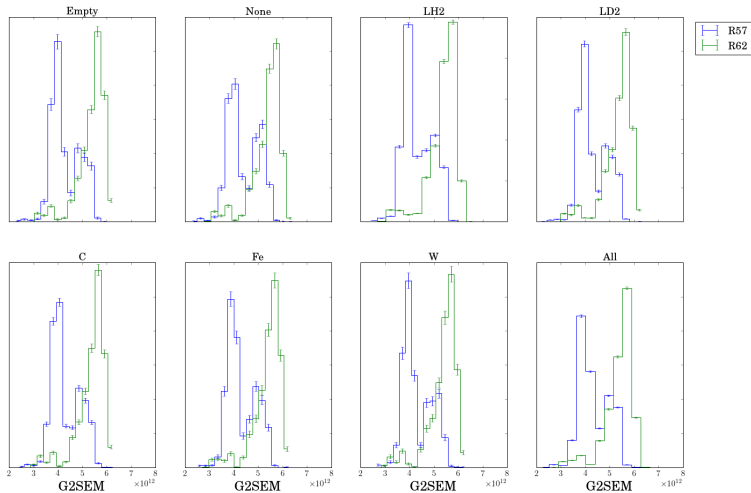
ϕ

ϕ



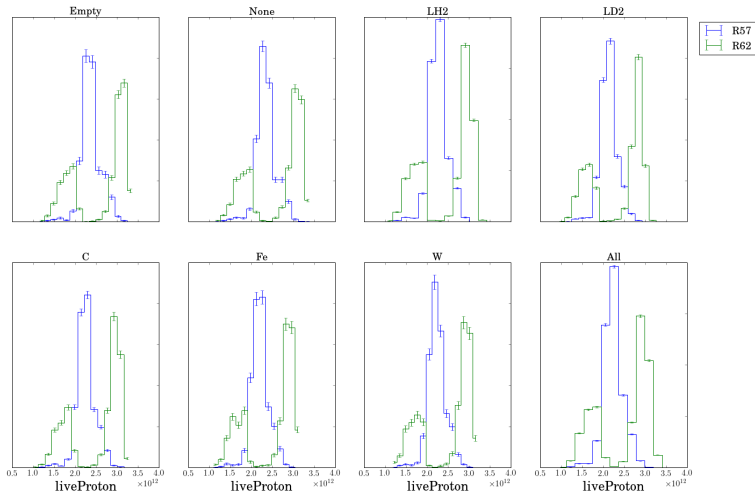
G2SEM

G2SEM

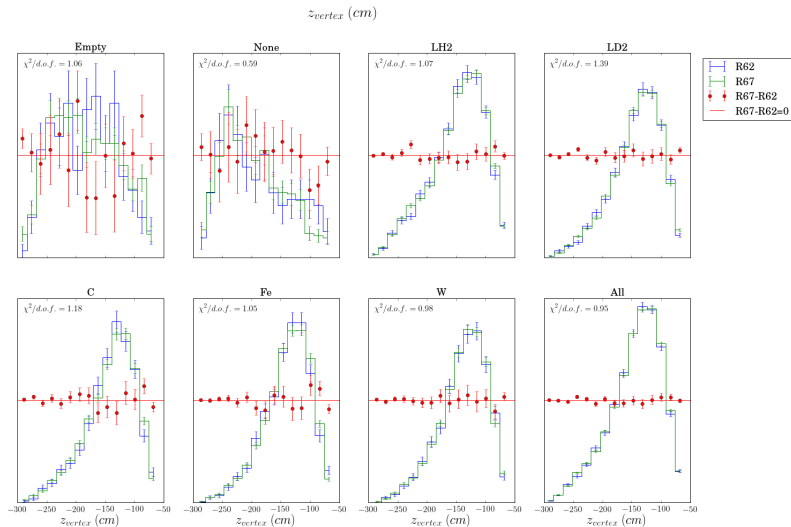


liveProton

liveProton

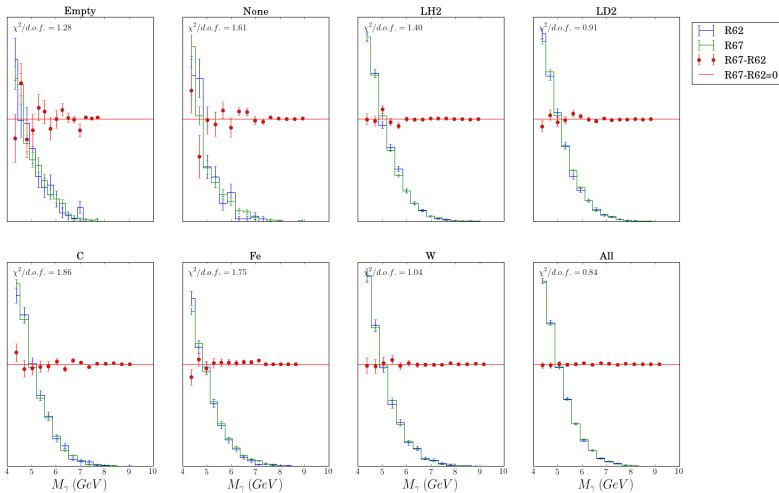


z_{vertex}



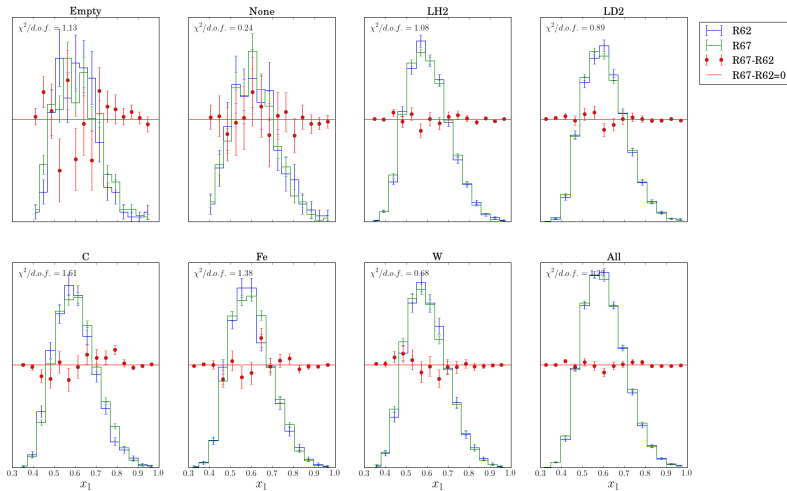
mass

M_γ (GeV)



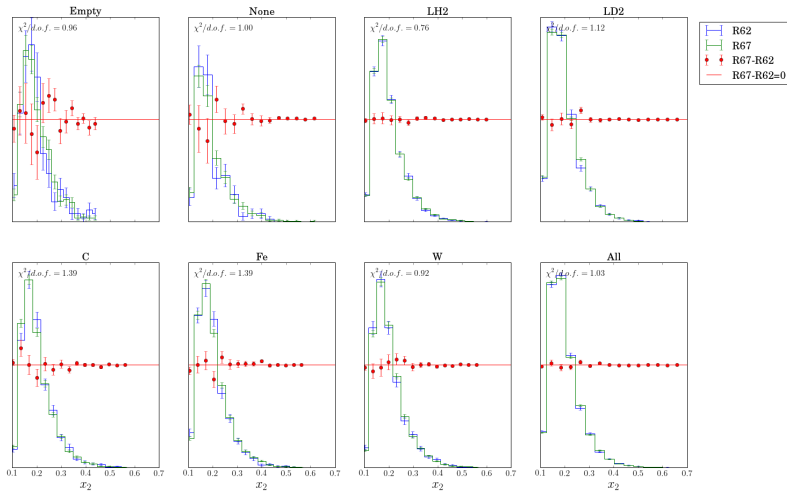
x_1

x_1



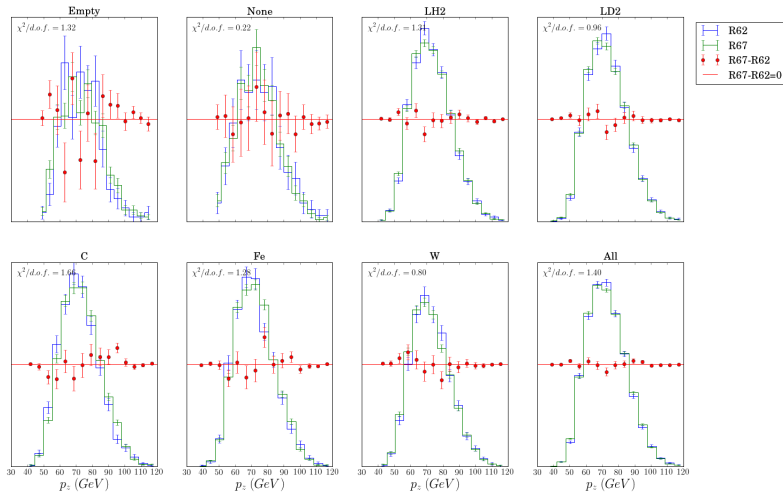
x_2

x_2



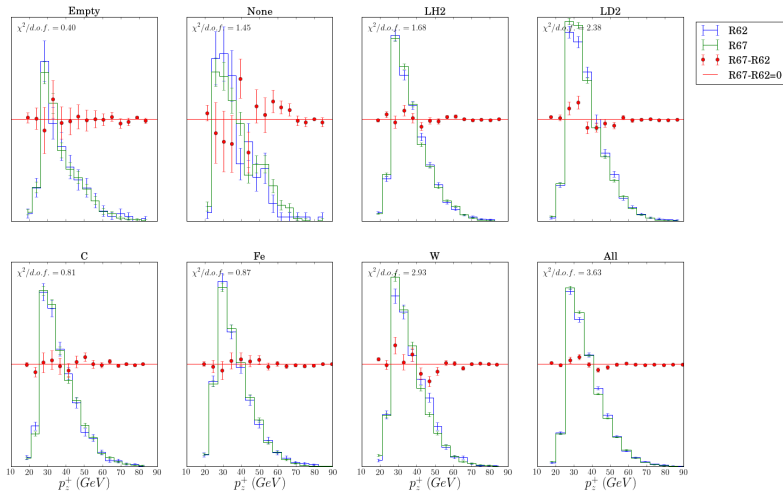
p_z

p_z (GeV)



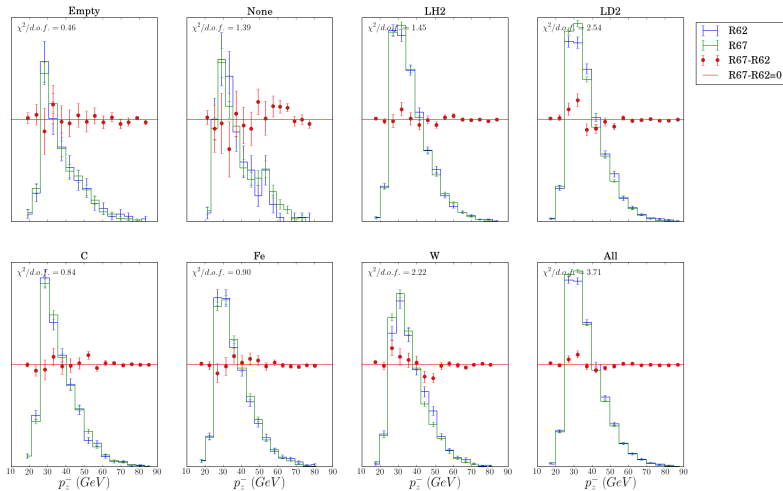
p_z^+

$p_z^+ (GeV)$



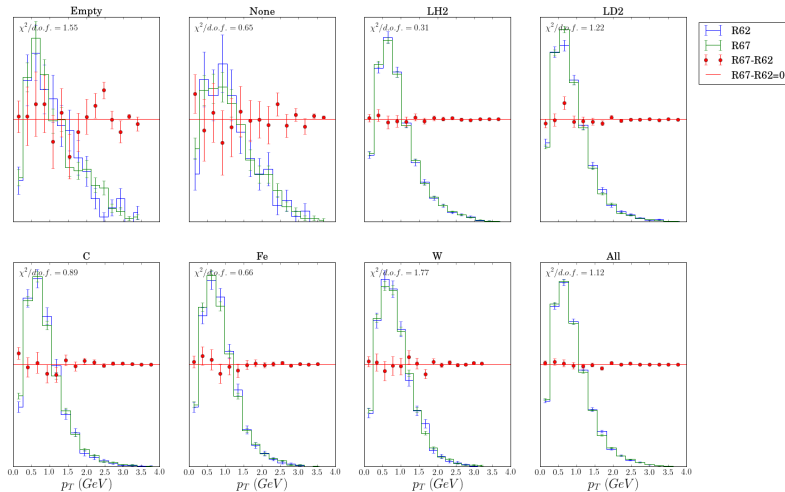
p_z^-

p_z^- (GeV)



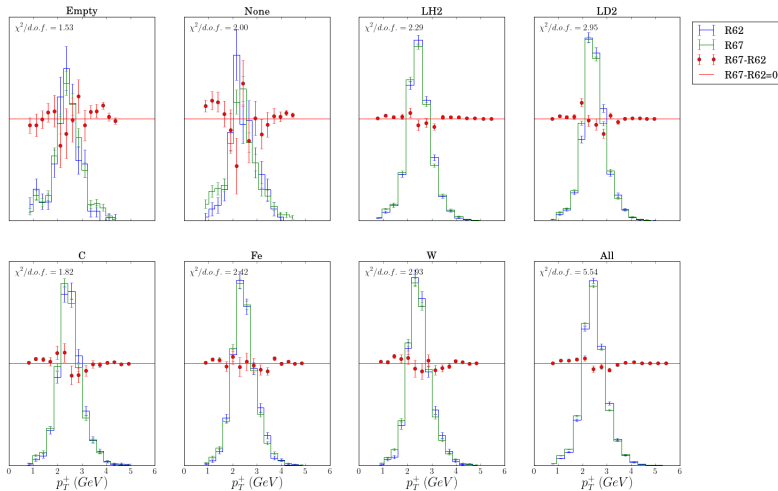
p_T

p_T (GeV)



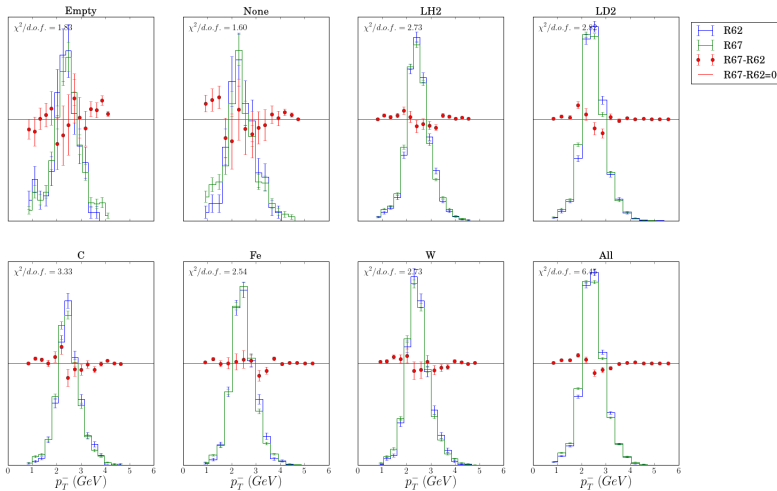
p_T^+

$p_T^+ \text{ (GeV)}$



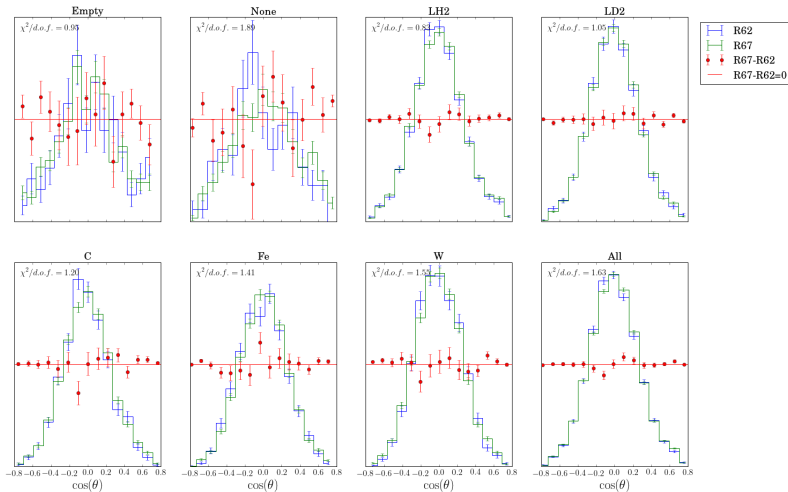
p_T^-

p_T^- (GeV)



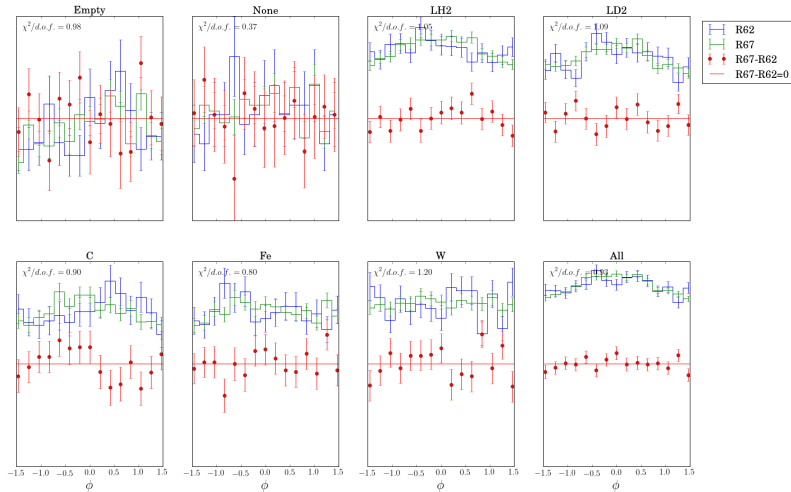
$\cos(\theta)$

$\cos(\theta)$



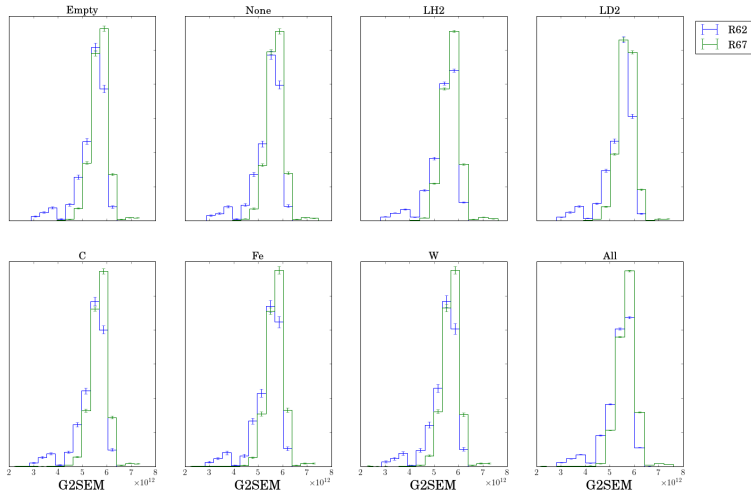
ϕ

ϕ



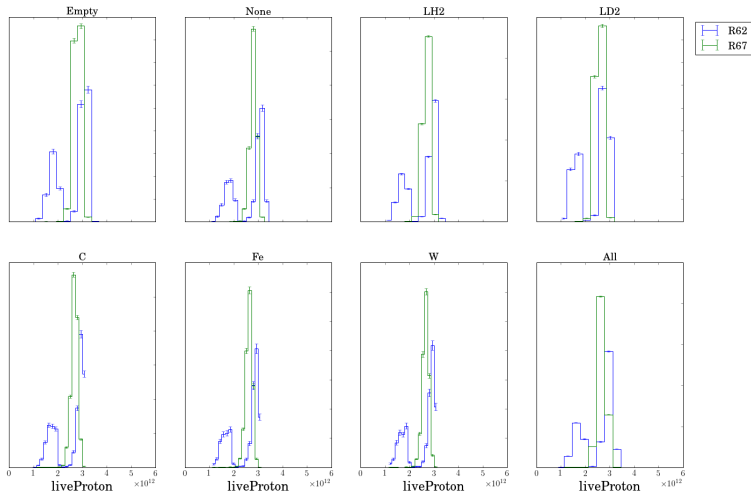
G2SEM

G2SEM

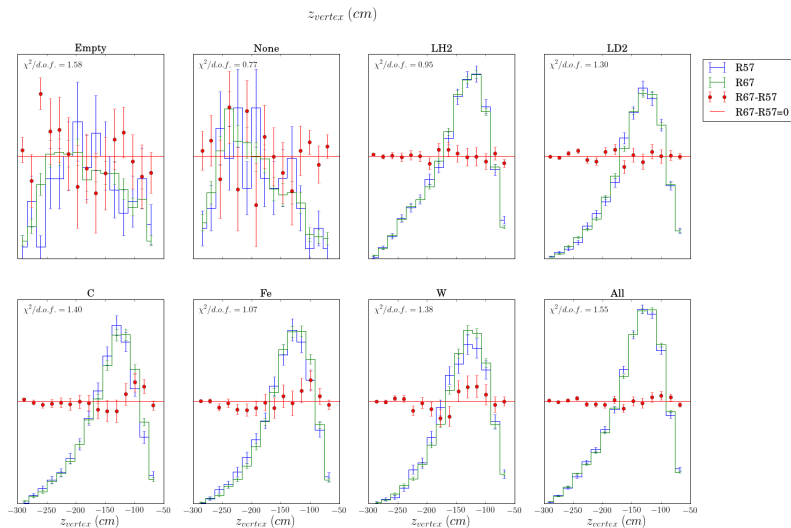


liveProton

liveProton

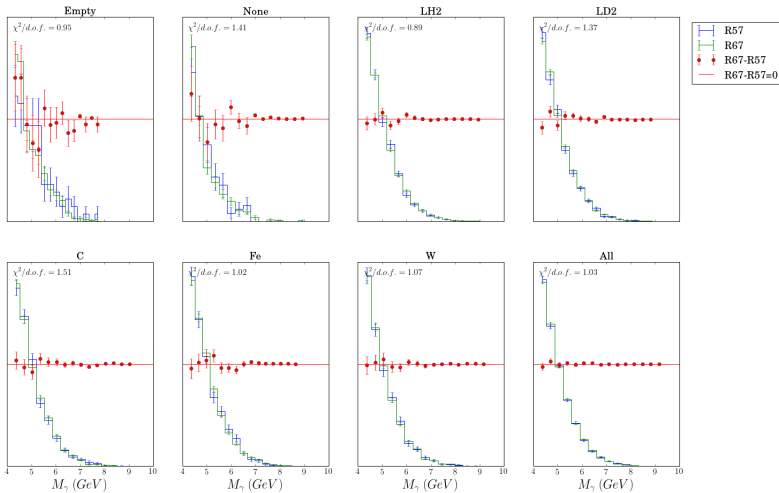


z_{vertex}



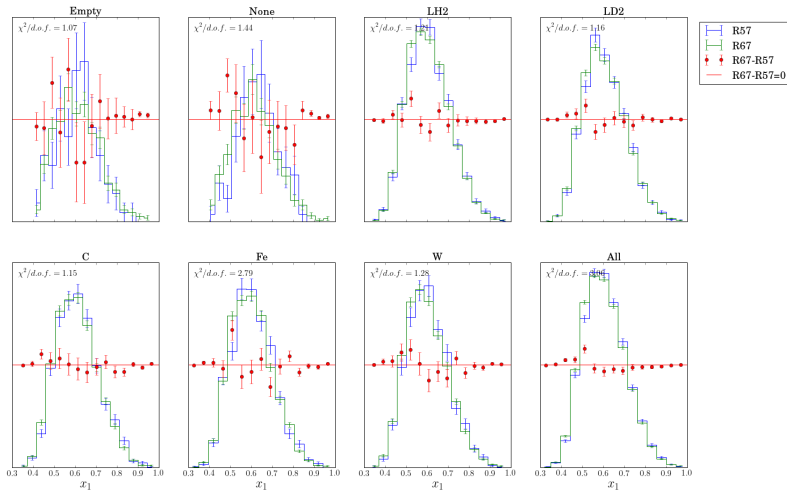
mass

M_γ (GeV)



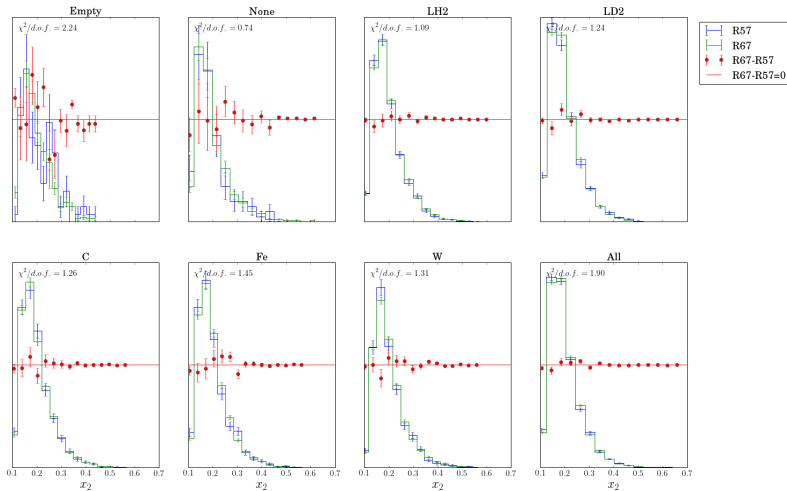
x_1

x_1



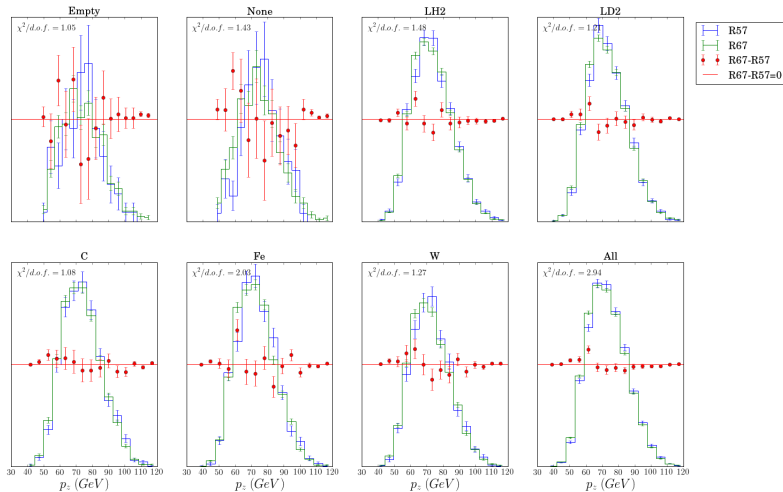
x_2

x_2



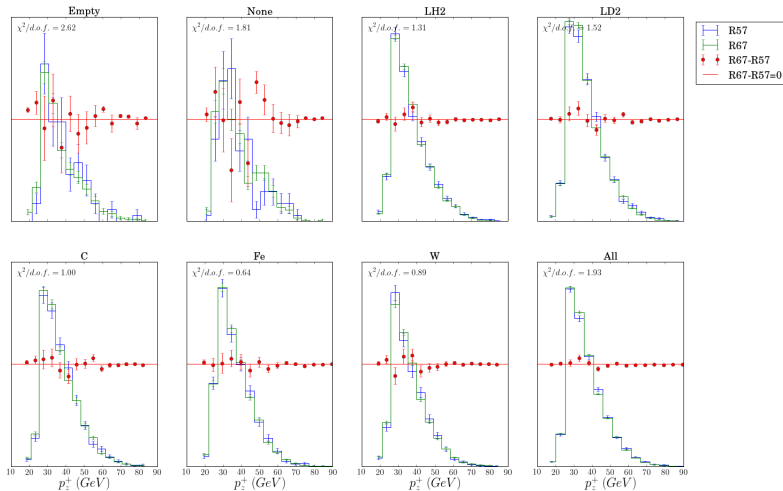
p_z

p_z (GeV)



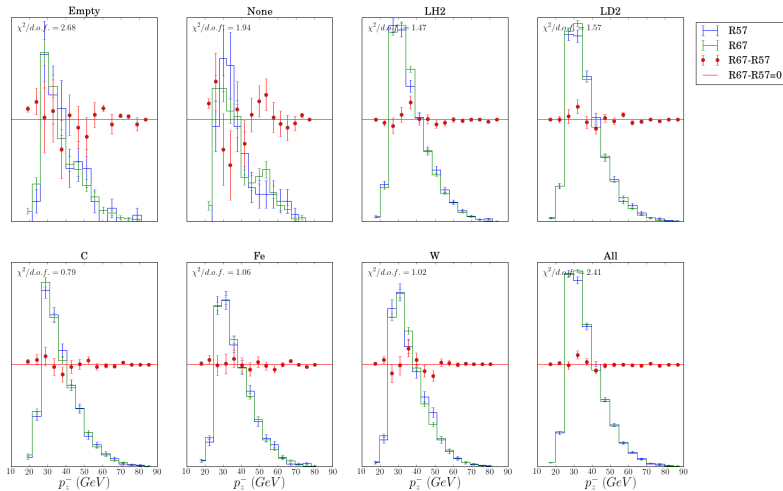
p_z^+

$p_z^+ \text{ (GeV)}$



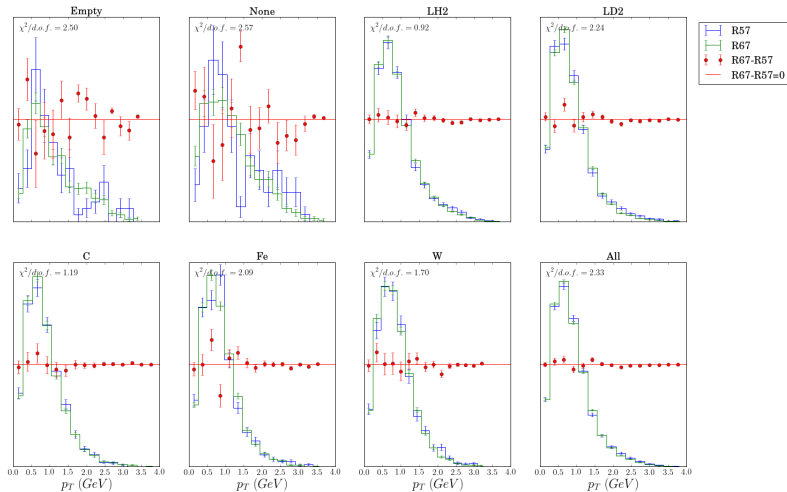
p_z^-

p_z^- (GeV)



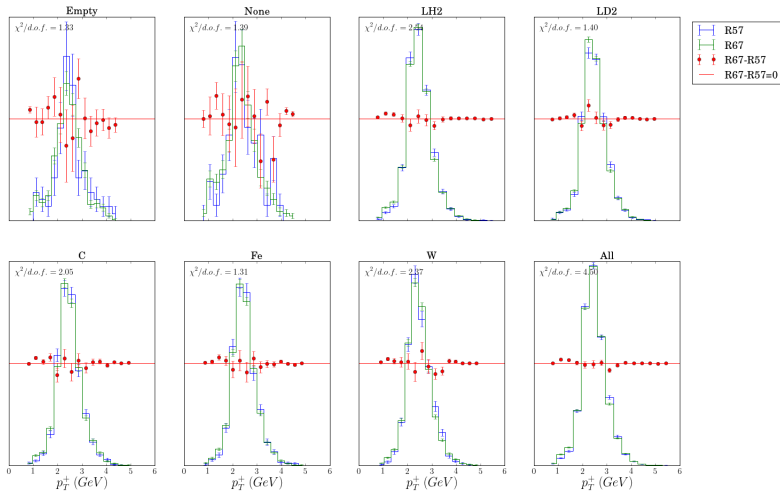
p_T

p_T (GeV)



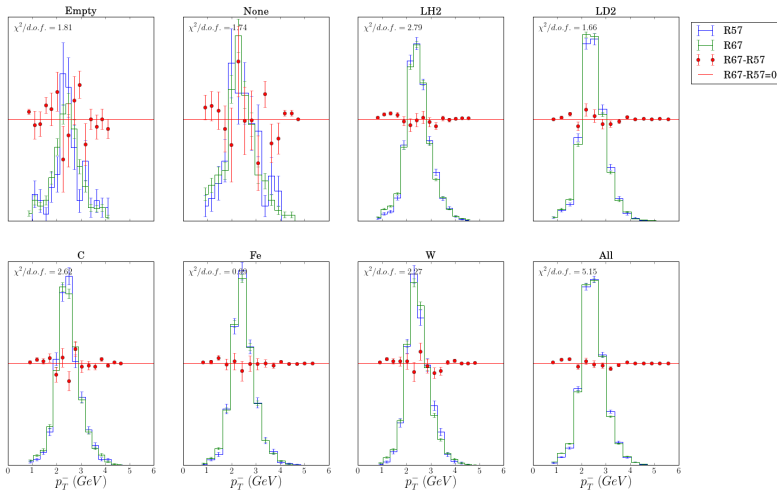
p_T^+

$p_T^+ \text{ (GeV)}$



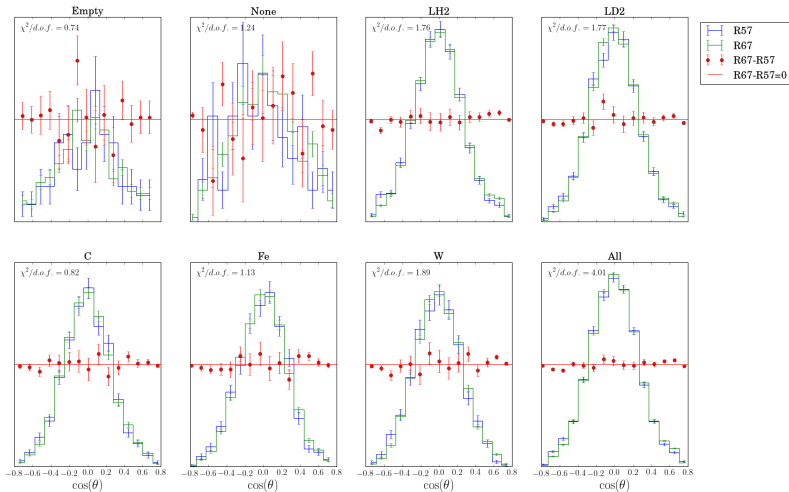
p_T^-

p_T^- (GeV)



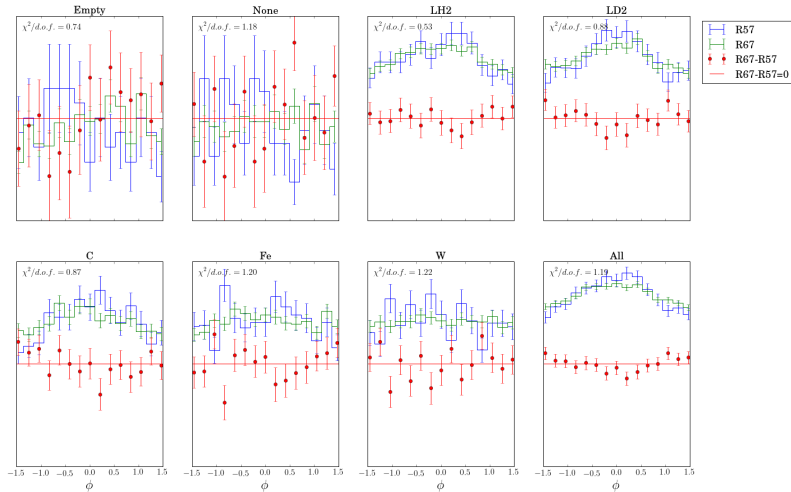
$\cos(\theta)$

$\cos(\theta)$



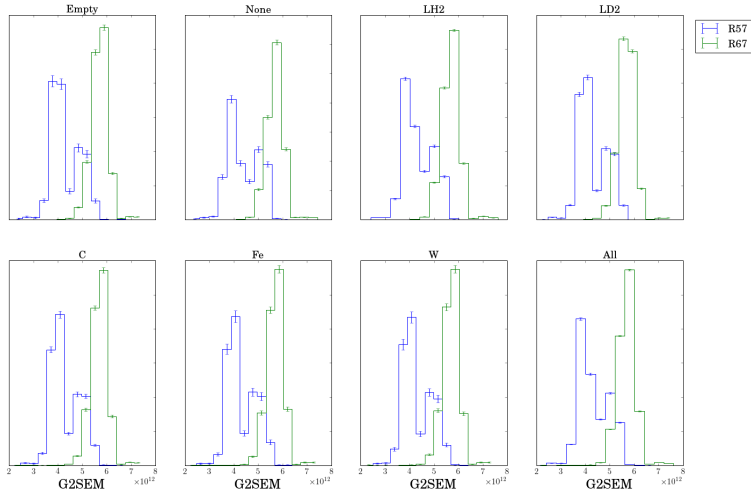
ϕ

ϕ



G2SEM

G2SEM



liveProton

liveProton

