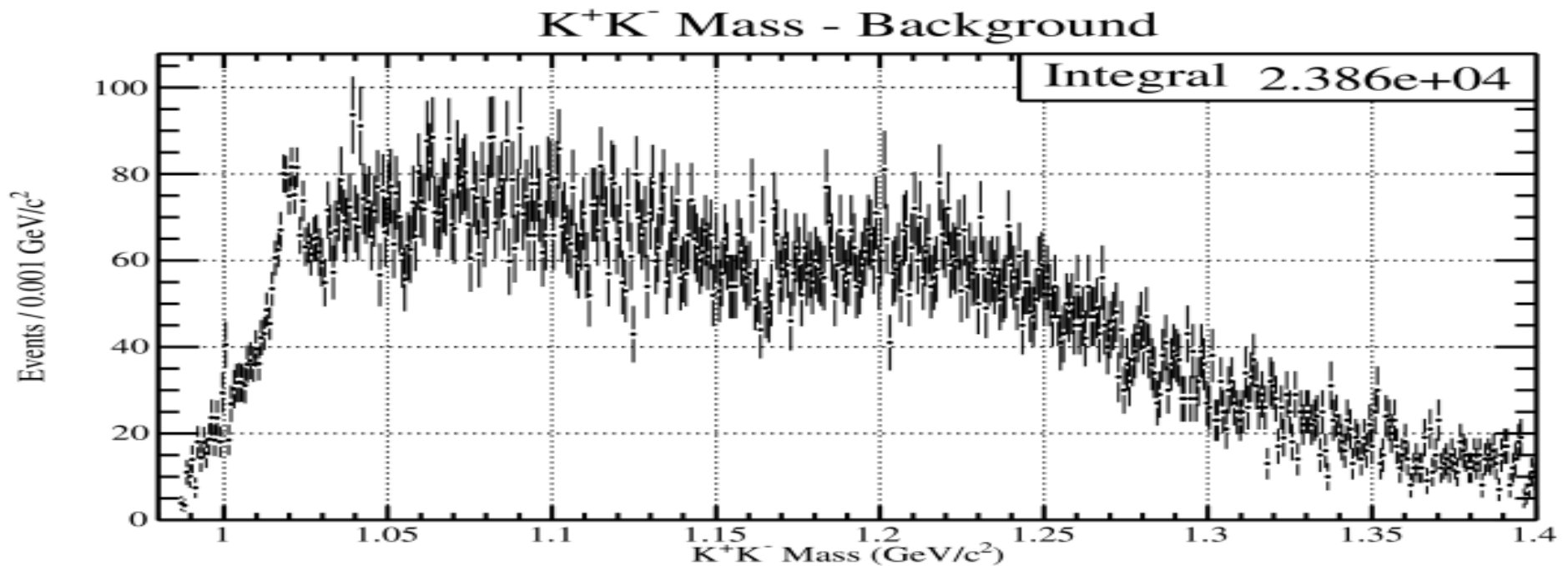
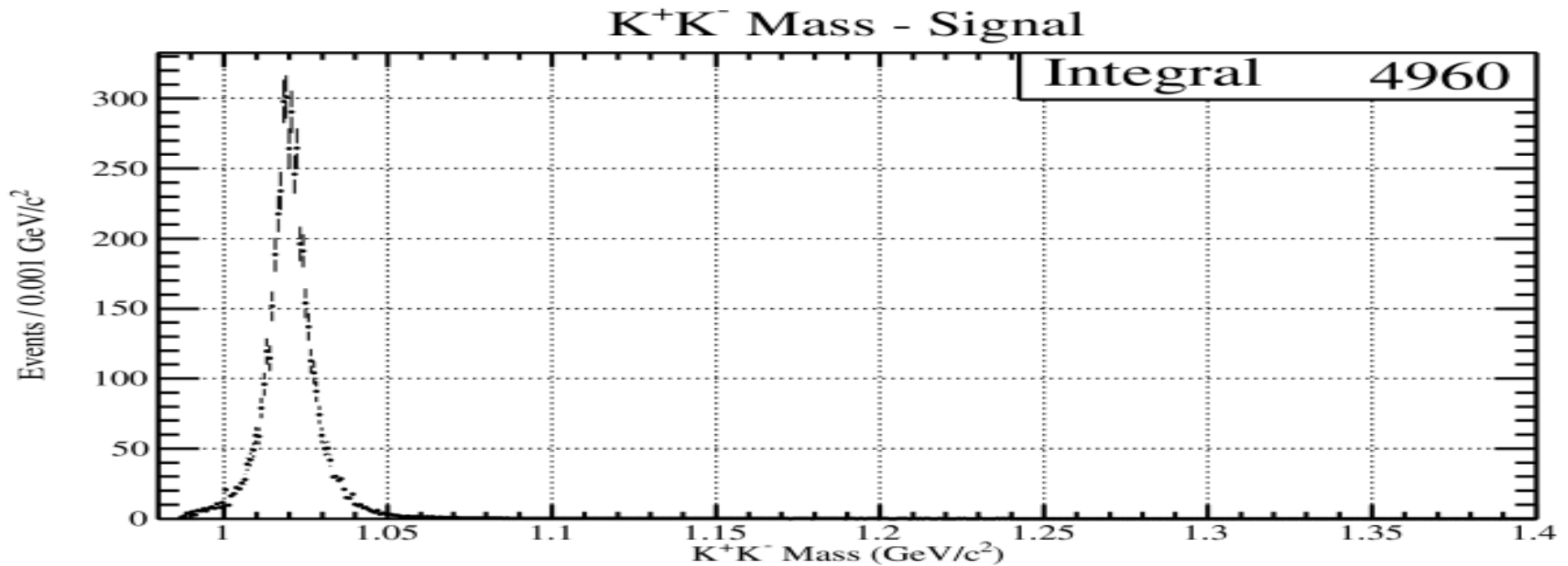


List of things this talk will discuss:

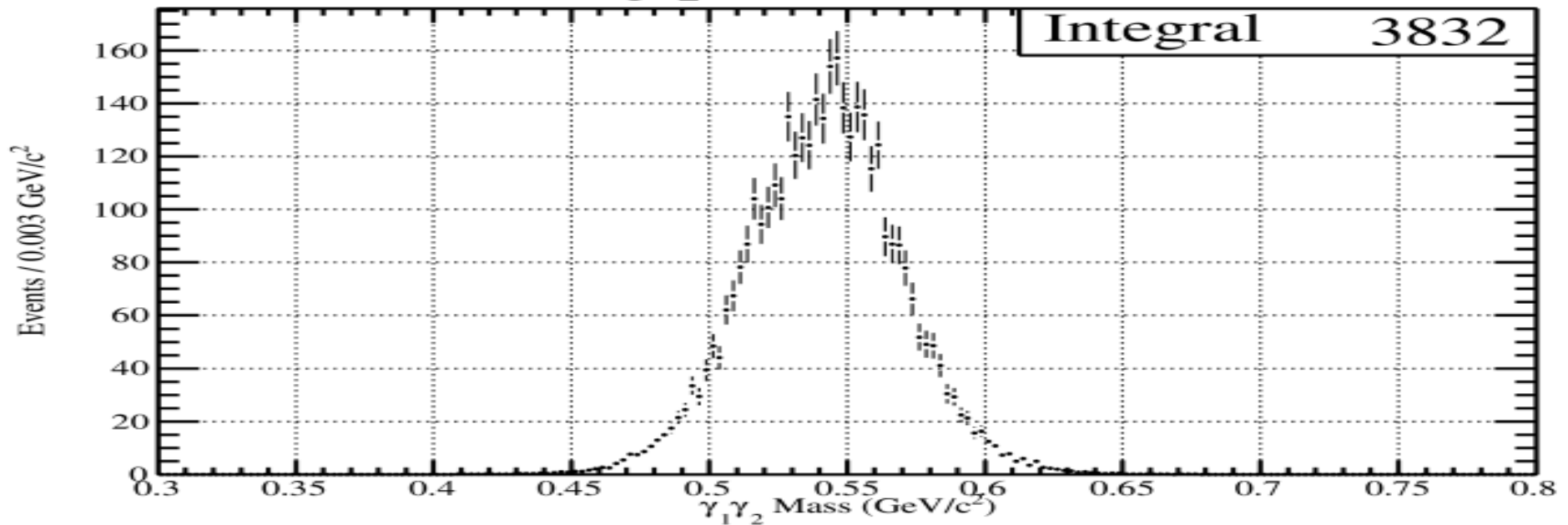
- Why was signal 'leaking' into background plots?
- New Qvalue study with different KK mass limits

OLD Phi: Qvalue Data

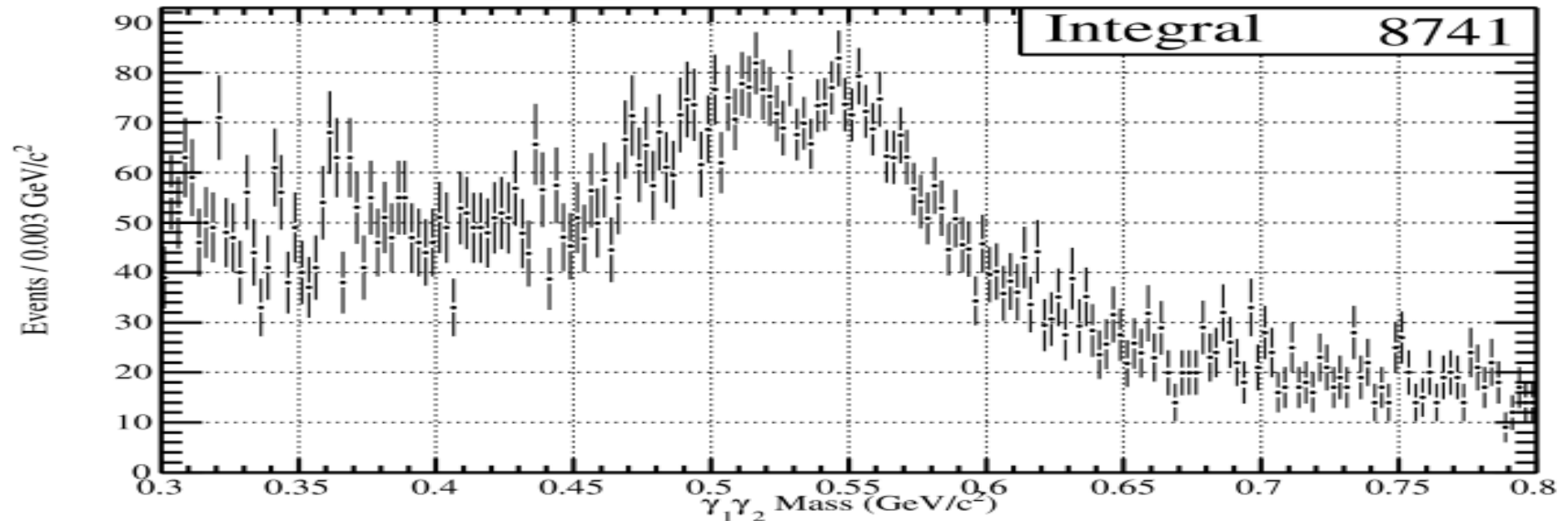


OLD Eta: Qvalue Data

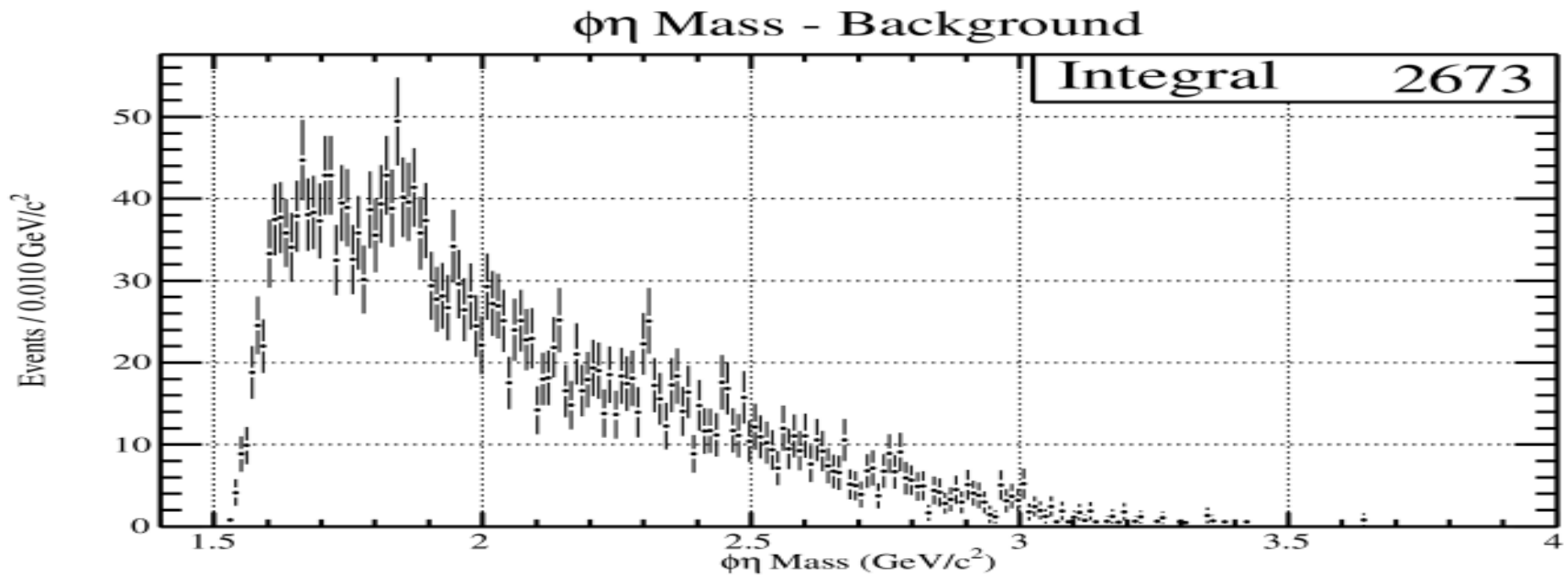
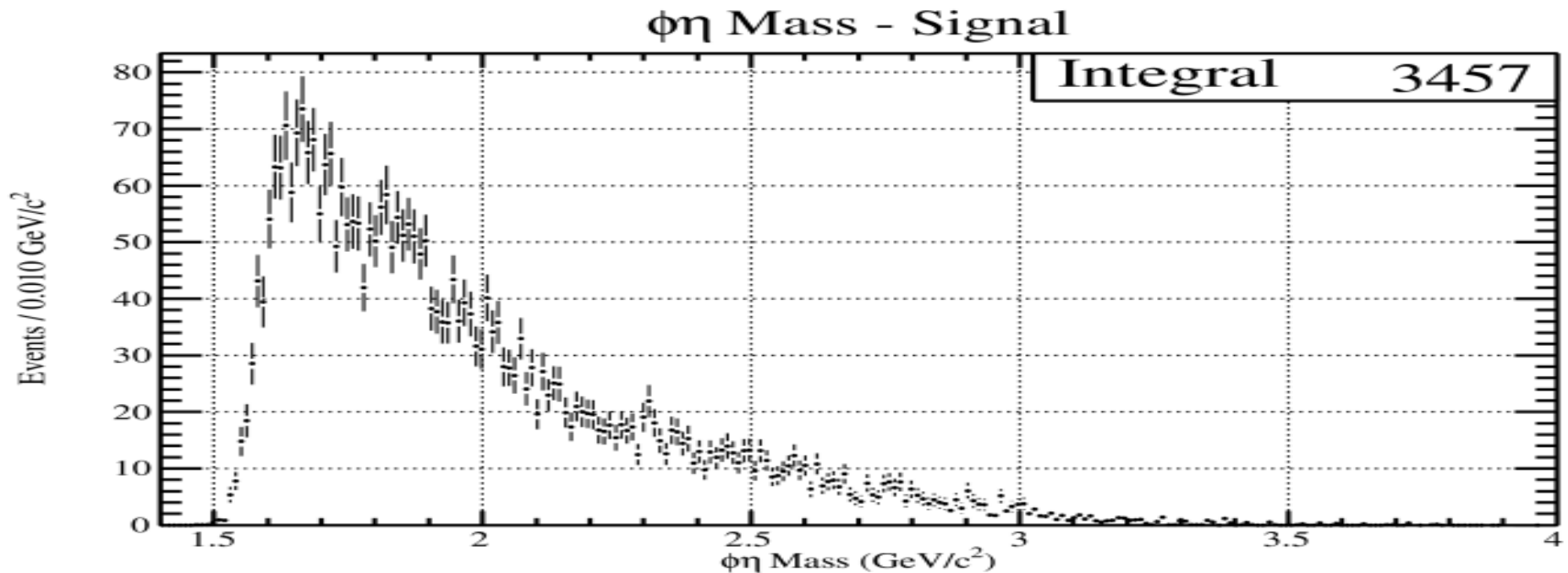
$\gamma_1\gamma_2$ Mass - Signal



$\gamma_1\gamma_2$ Mass - Background



OLD PhiEta: Qvalue Data

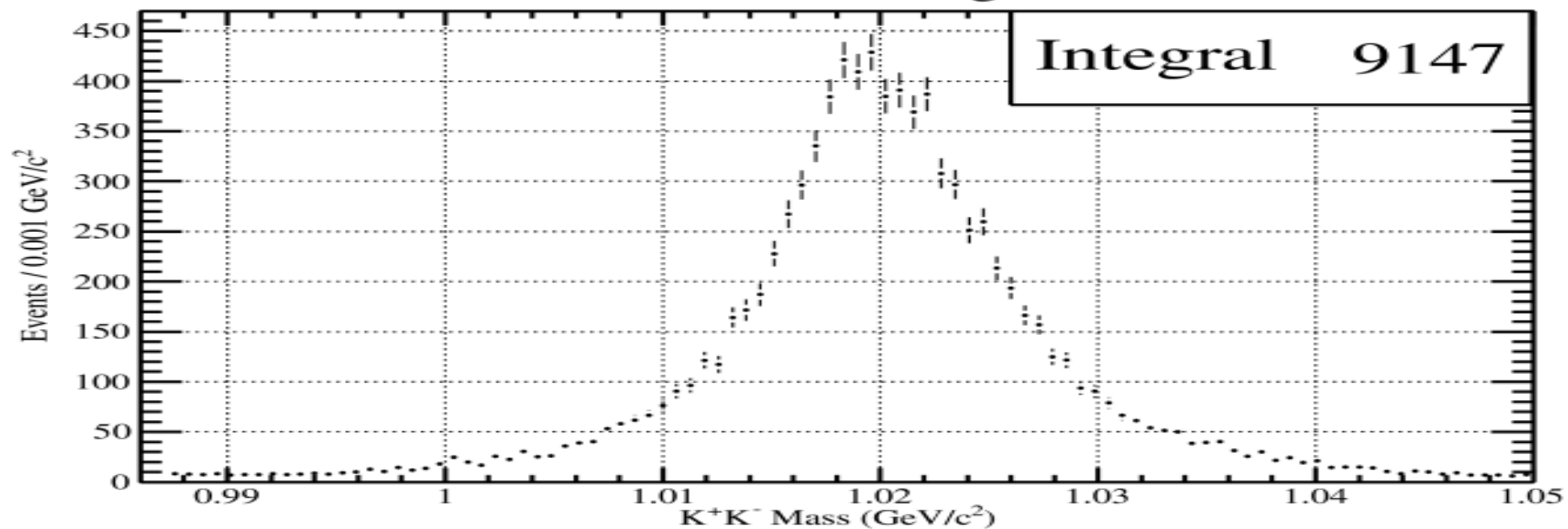


The issue with the old Qvalue Method:

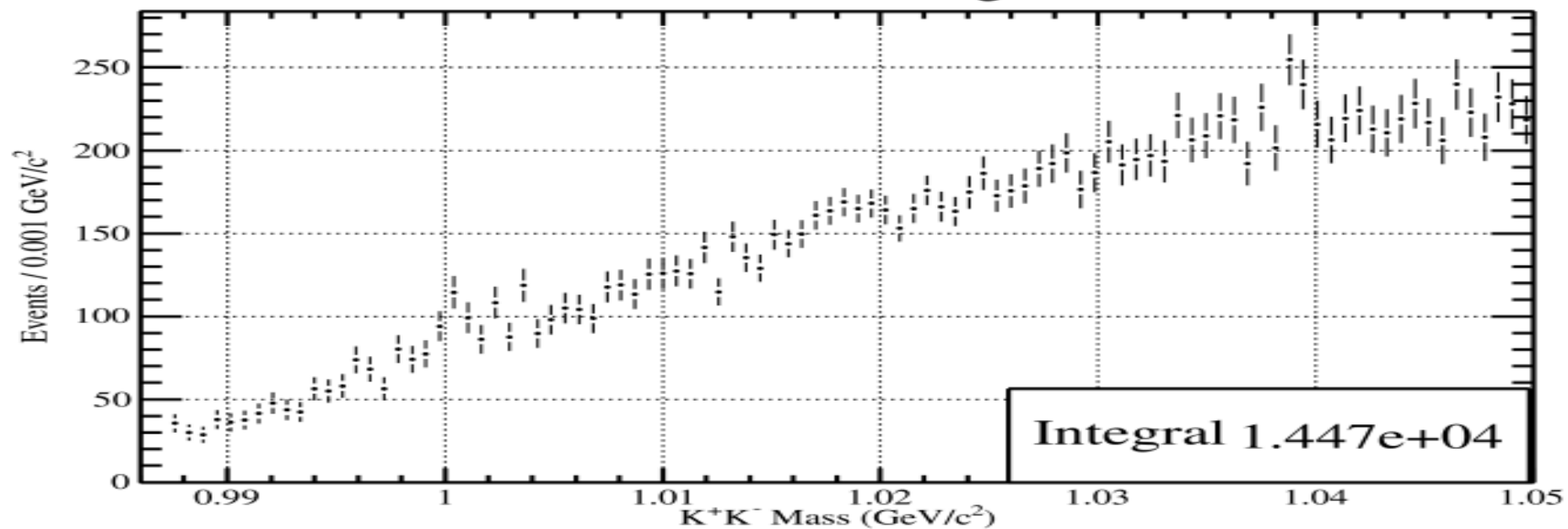
- Why was signal 'leaking' into background plots?
 - After studying these events, it was found that many of them shared nearest neighbors with high KK mass events.
 - The large amount of extra background events increased the probability of a 'good' event sharing similar kinematics to background events.
 - This surplus of extra background caused a noticeable amount of signal to be leaked into the background plots.
- Solution: Reduce the KKGG phase space, such that there is still plenty of background not so many events
 - Instead of looking at KK events between 0.98-1.4, we now only consider the range 0.98-1.05

NEW Phi: Qvalue

K^+K^- Mass - Signal

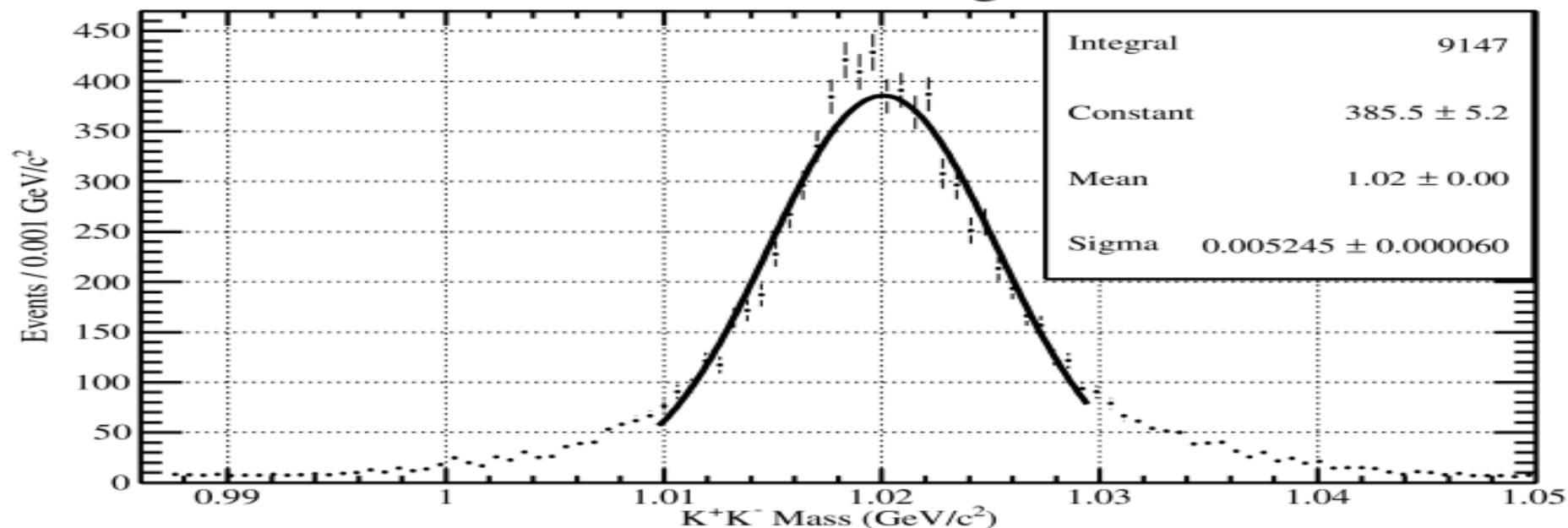


K^+K^- Mass - Background

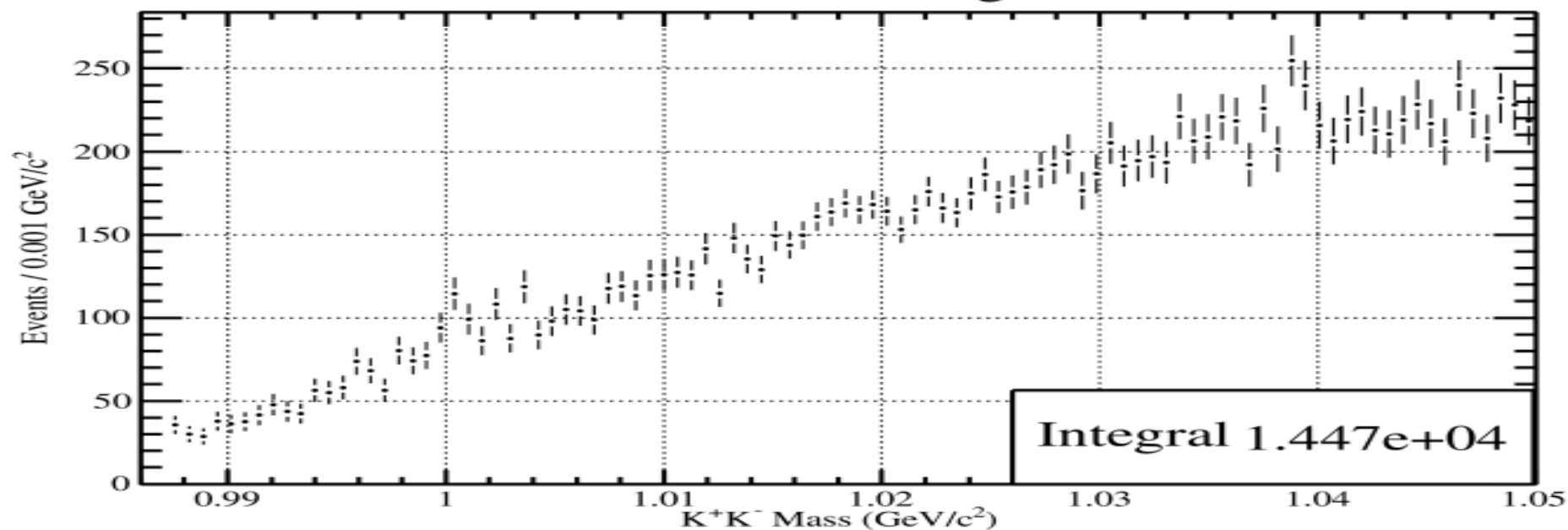


New Phi Fit: Qvalue

K^+K^- Mass - Signal

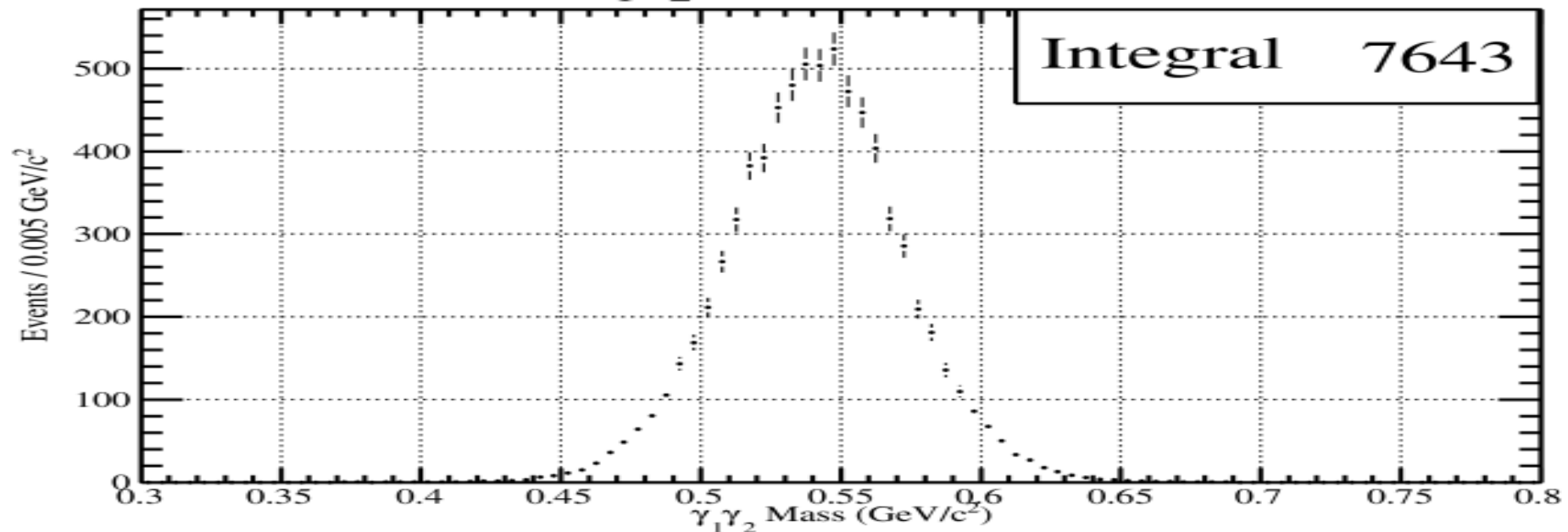


K^+K^- Mass - Background

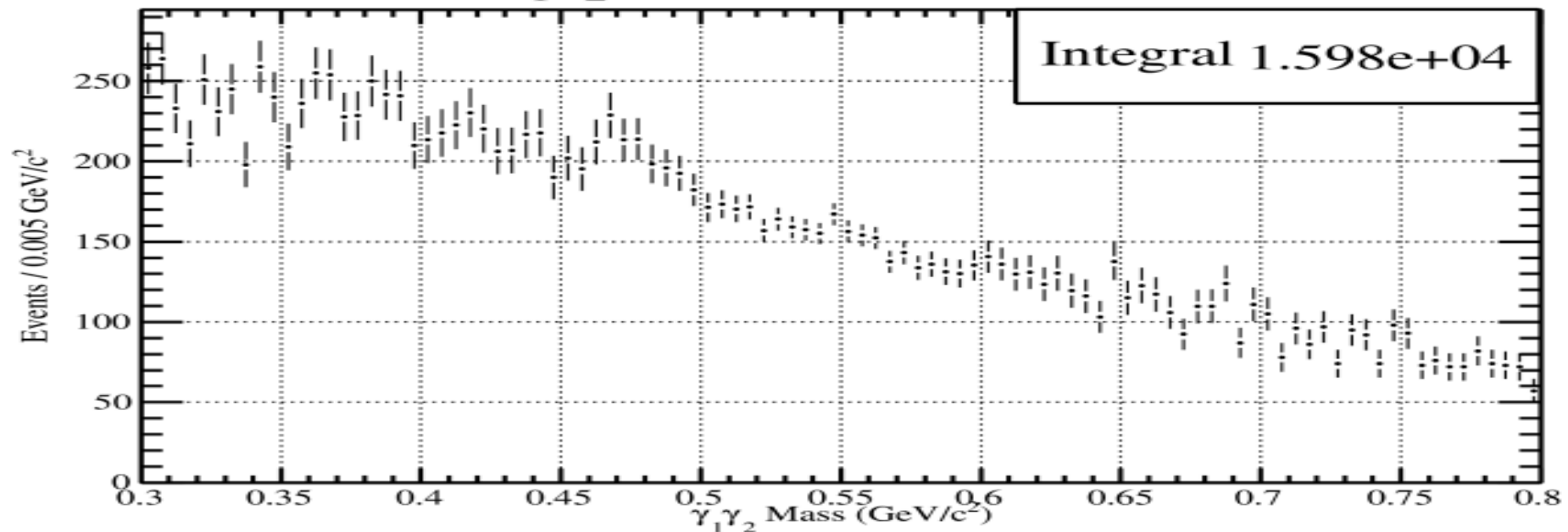


New Eta: Qvalue

$\gamma_1\gamma_2$ Mass - Signal

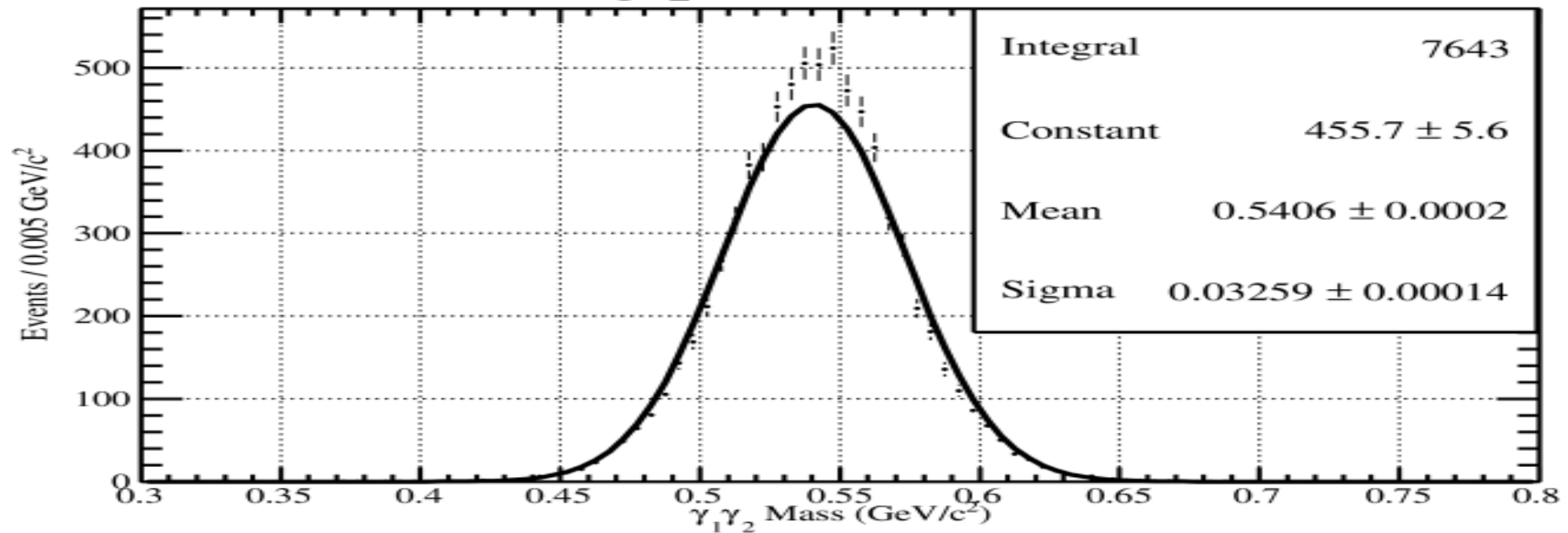


$\gamma_1\gamma_2$ Mass - Background

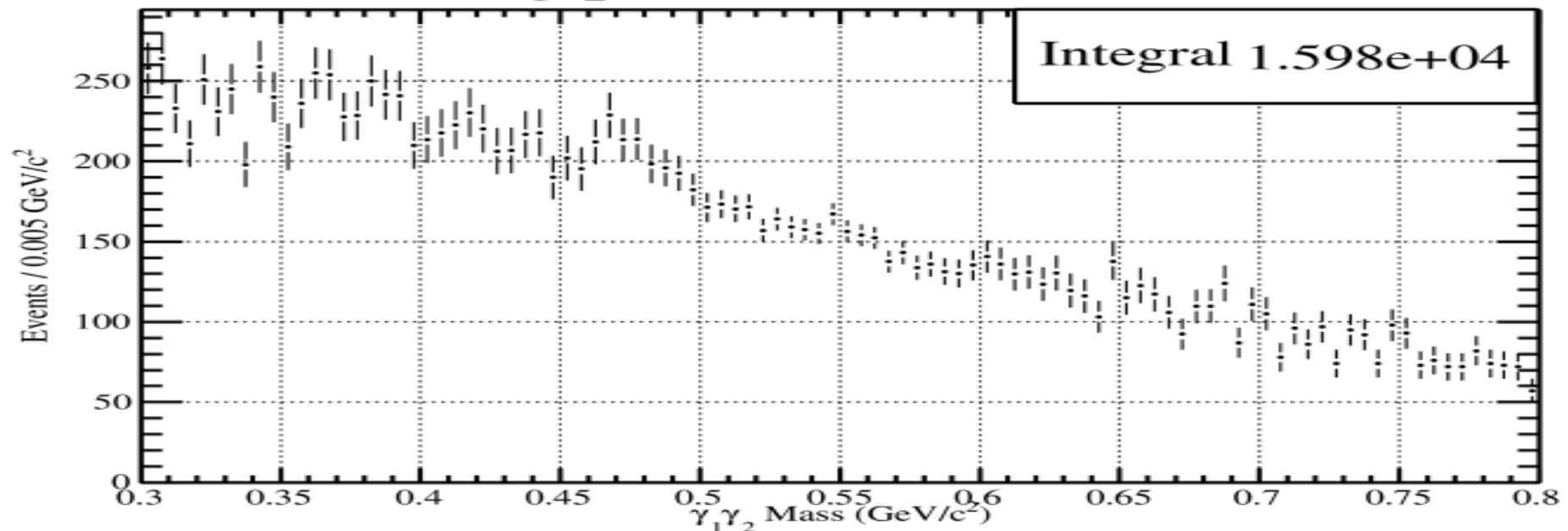


New Eta Fit: Qvalue

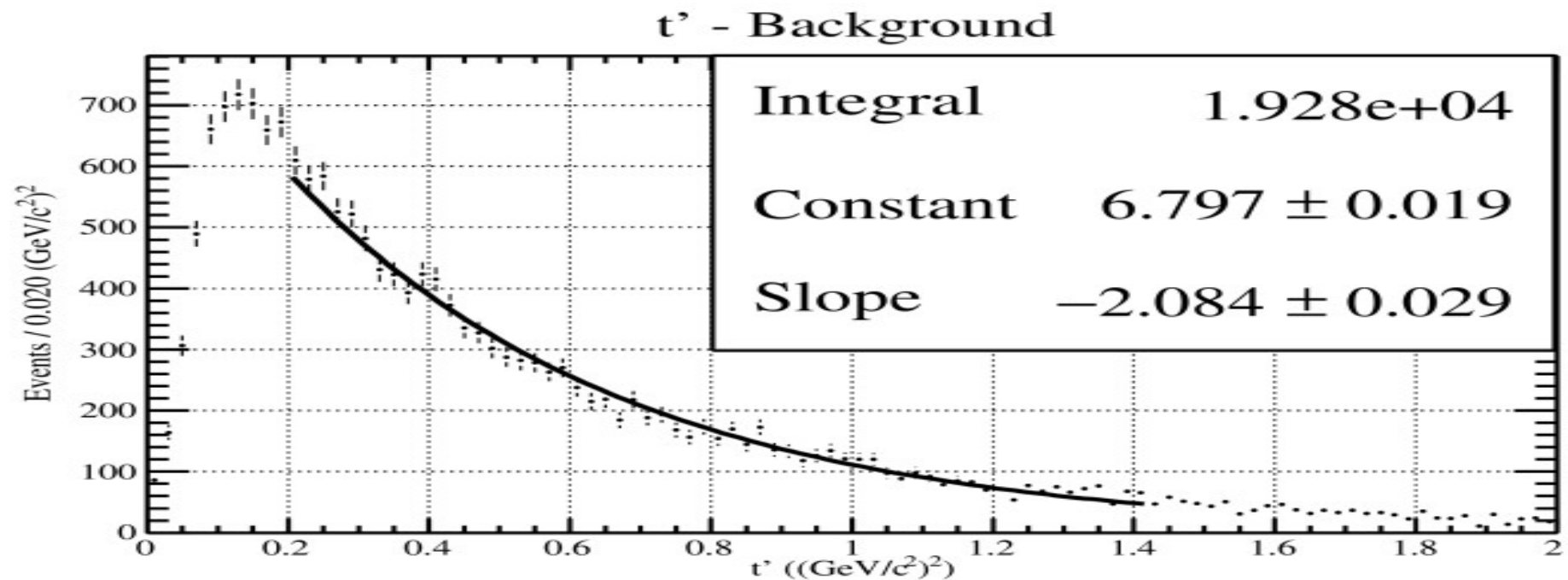
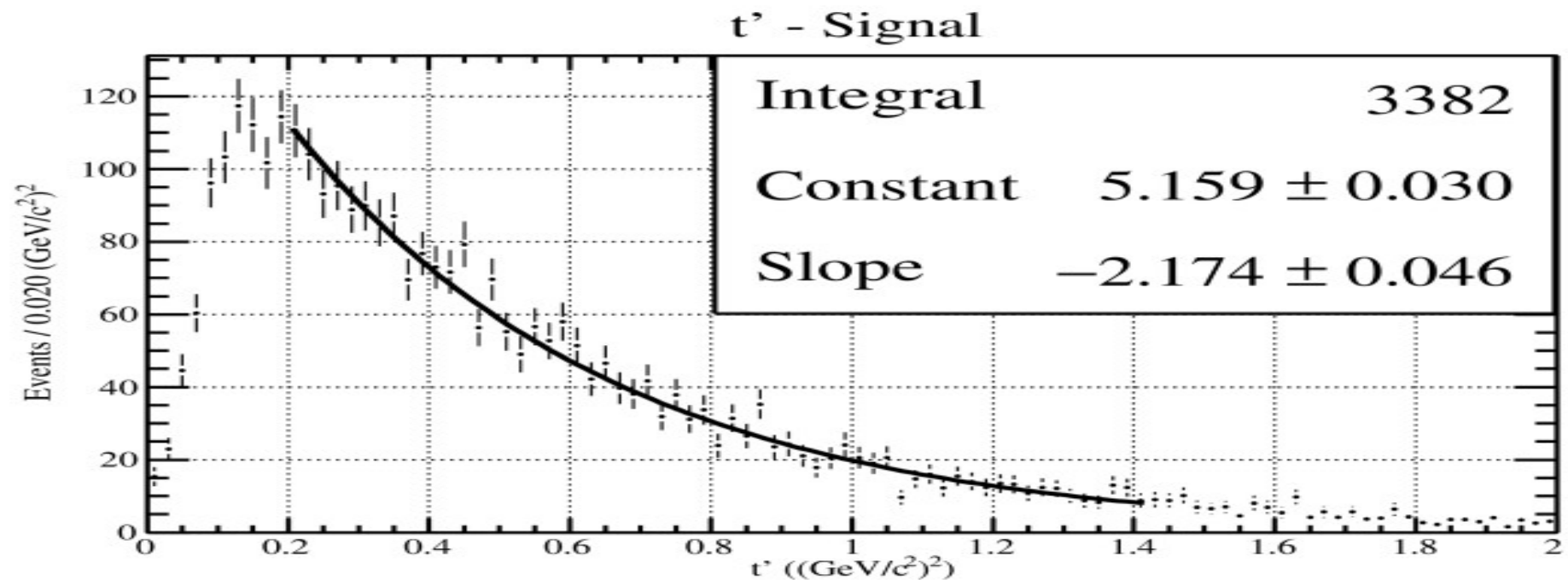
$\gamma_1\gamma_2$ Mass - Signal



$\gamma_1\gamma_2$ Mass - Background

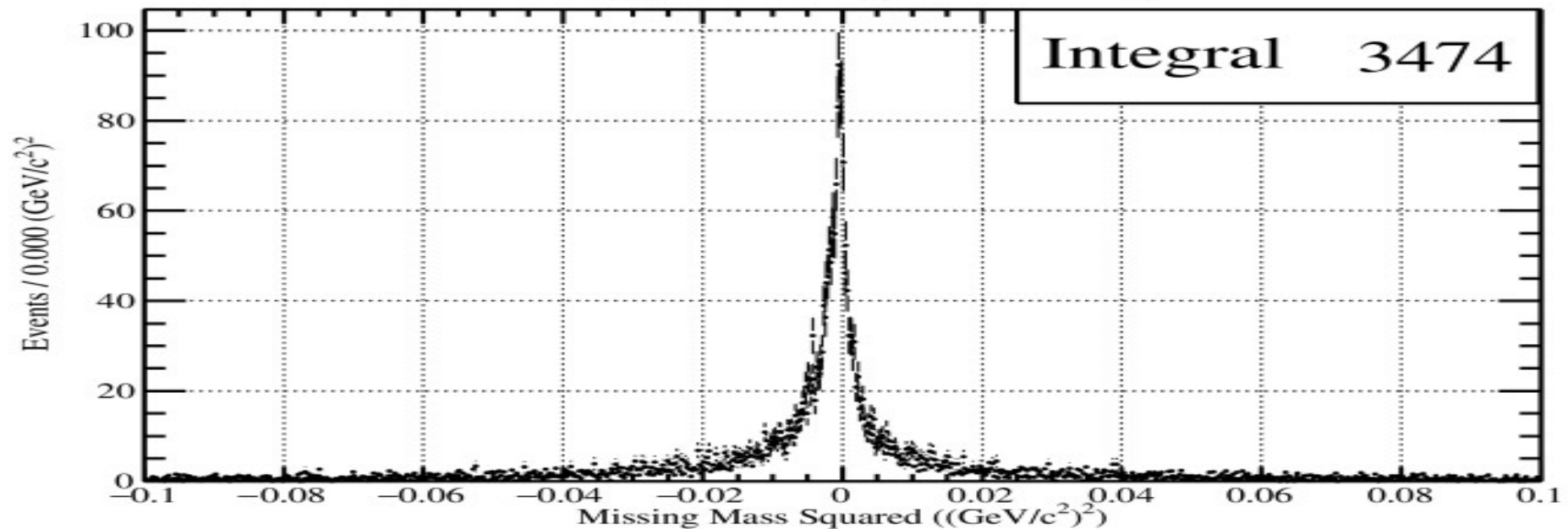


New t: Qvalue

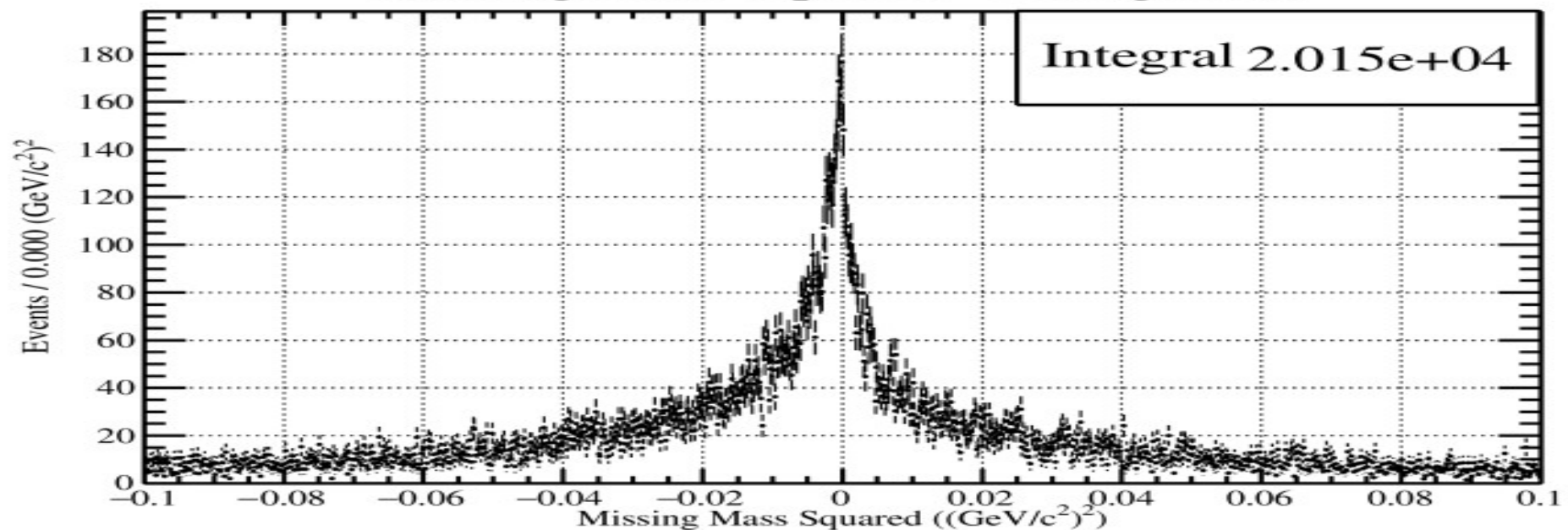


New Missing Mass Squared: Qvalue

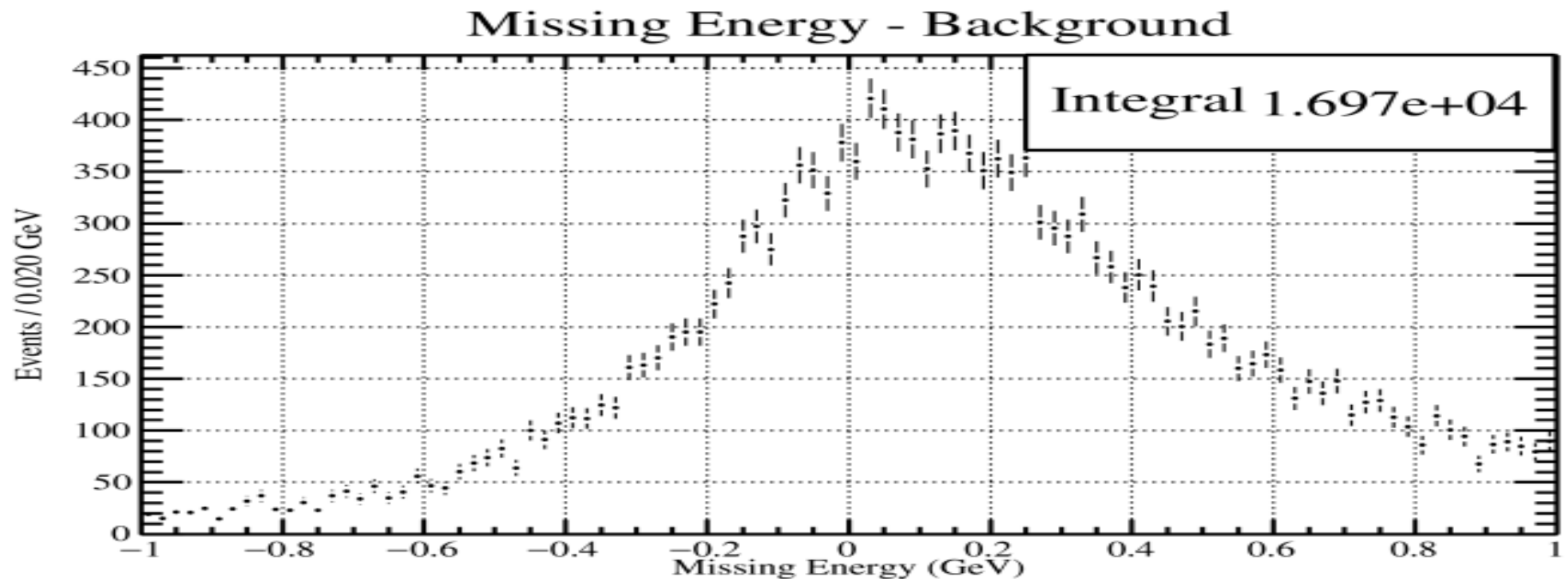
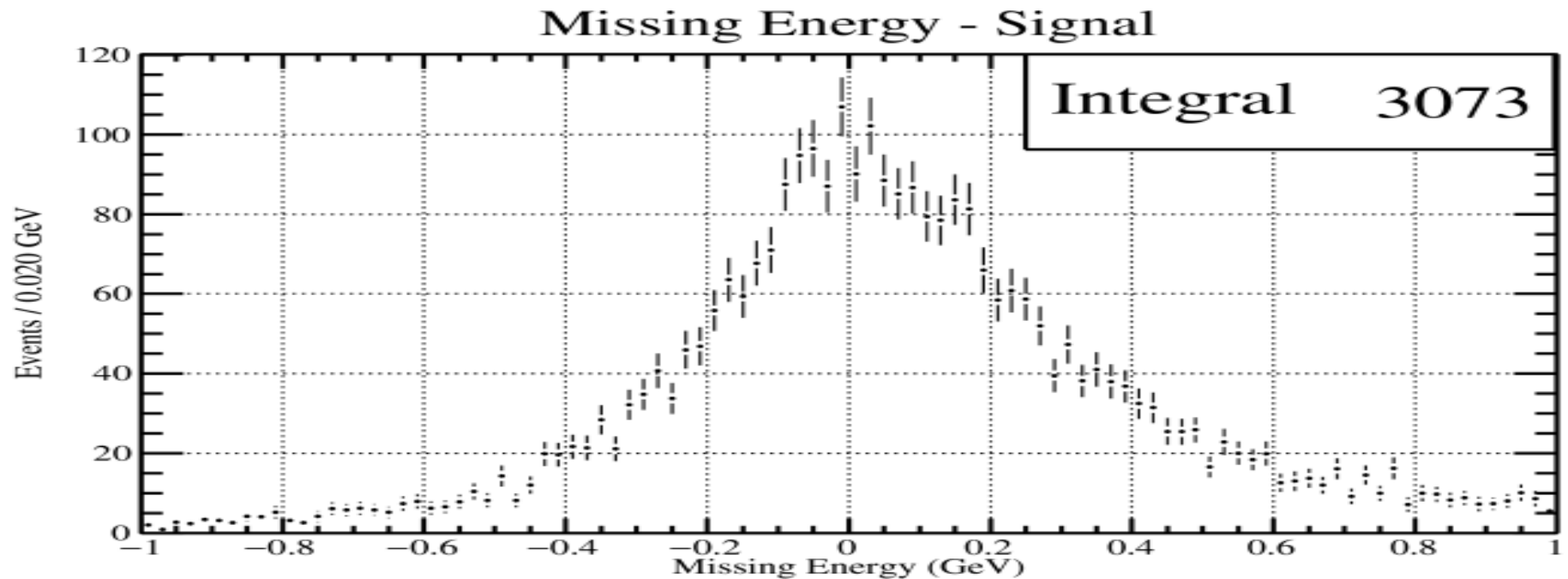
Missing Mass Squared - Signal



Missing Mass Squared - Background

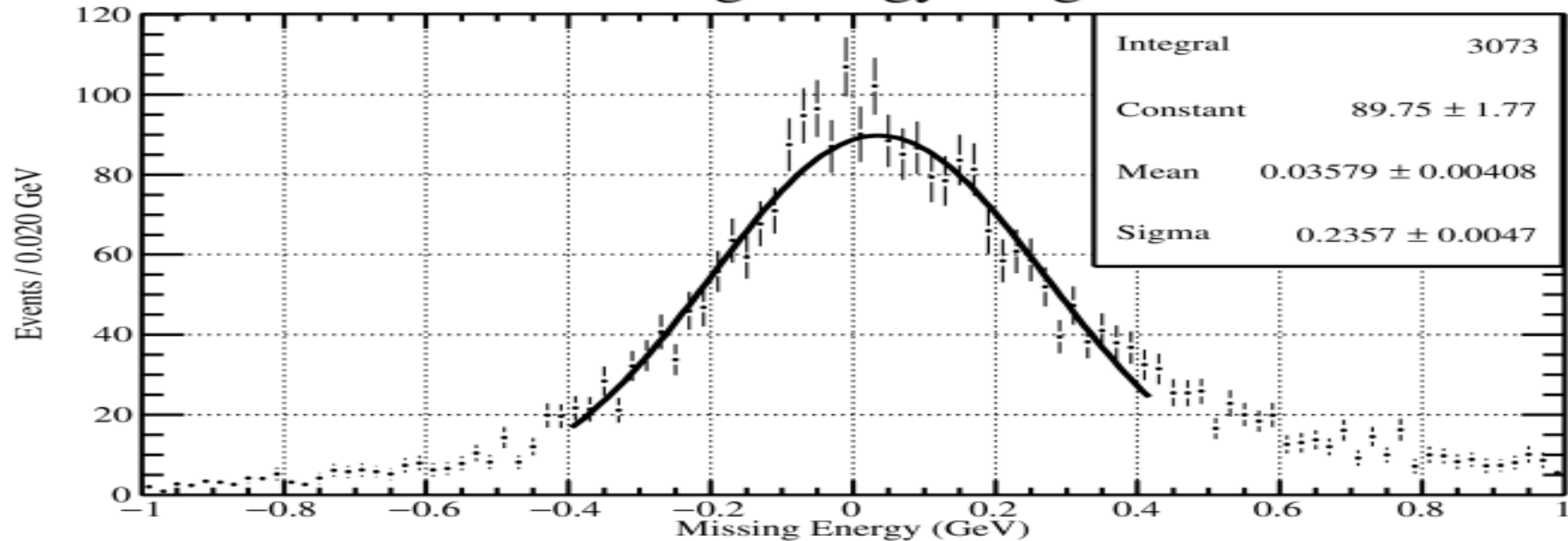


New Missing Energy: Qvalue

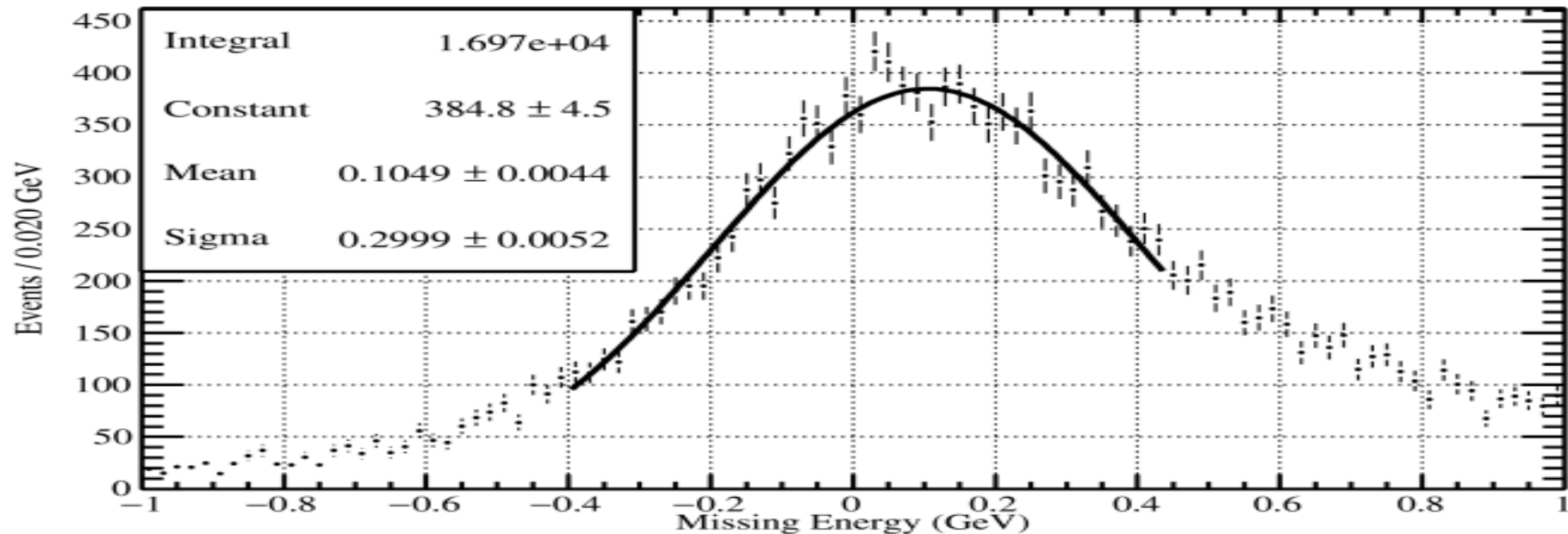


New Missing Energy Fit: Qvalue

Missing Energy - Signal

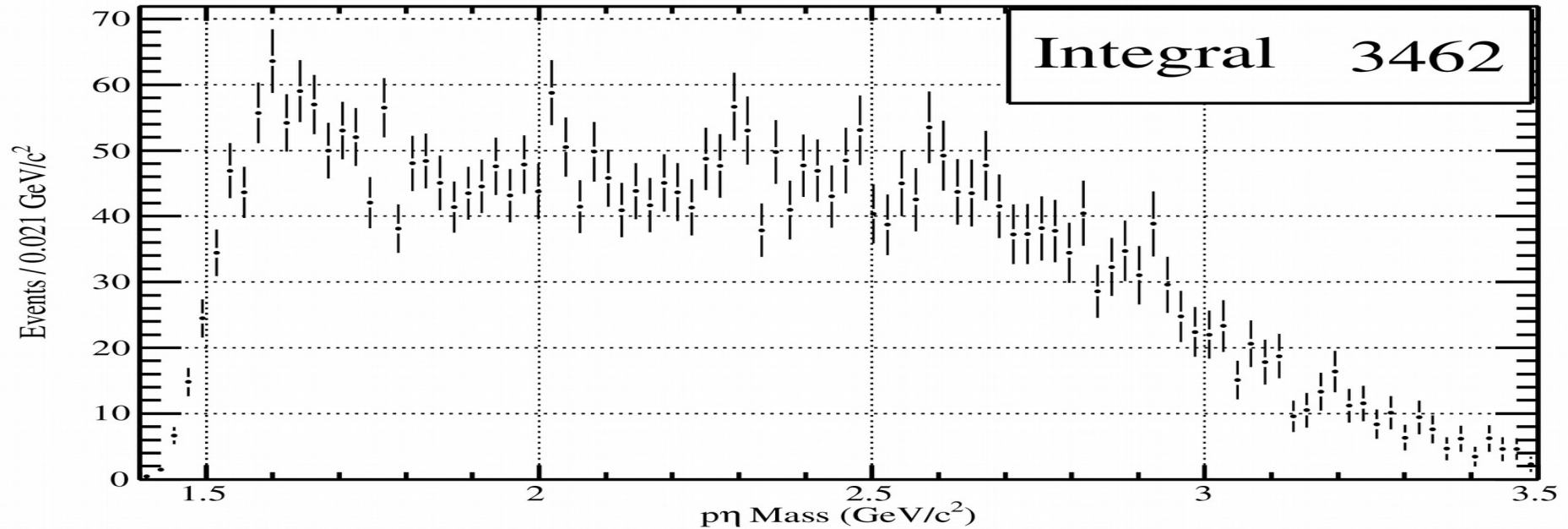


Missing Energy - Background

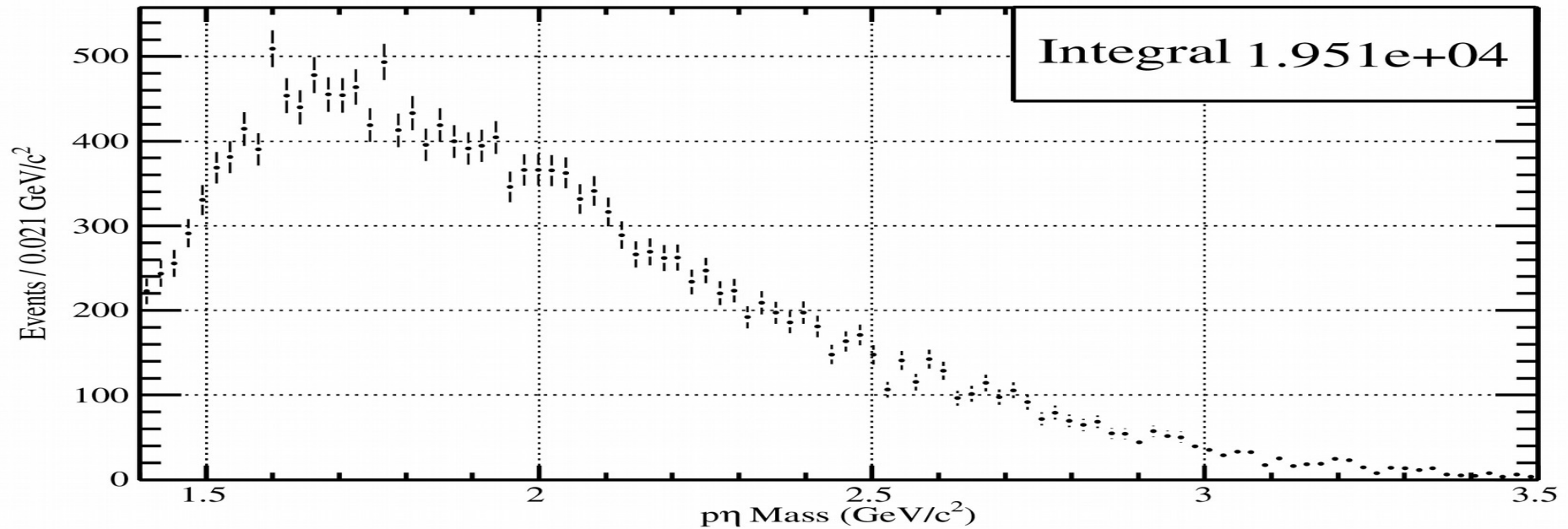


New P η : Qvalue

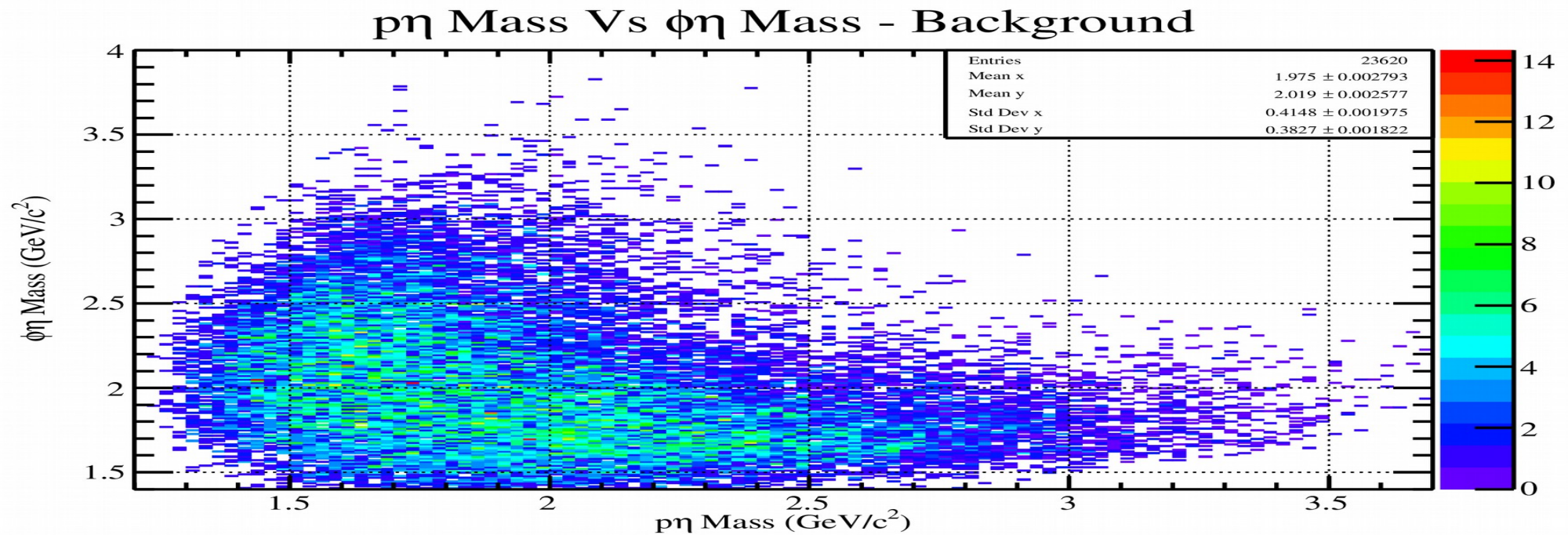
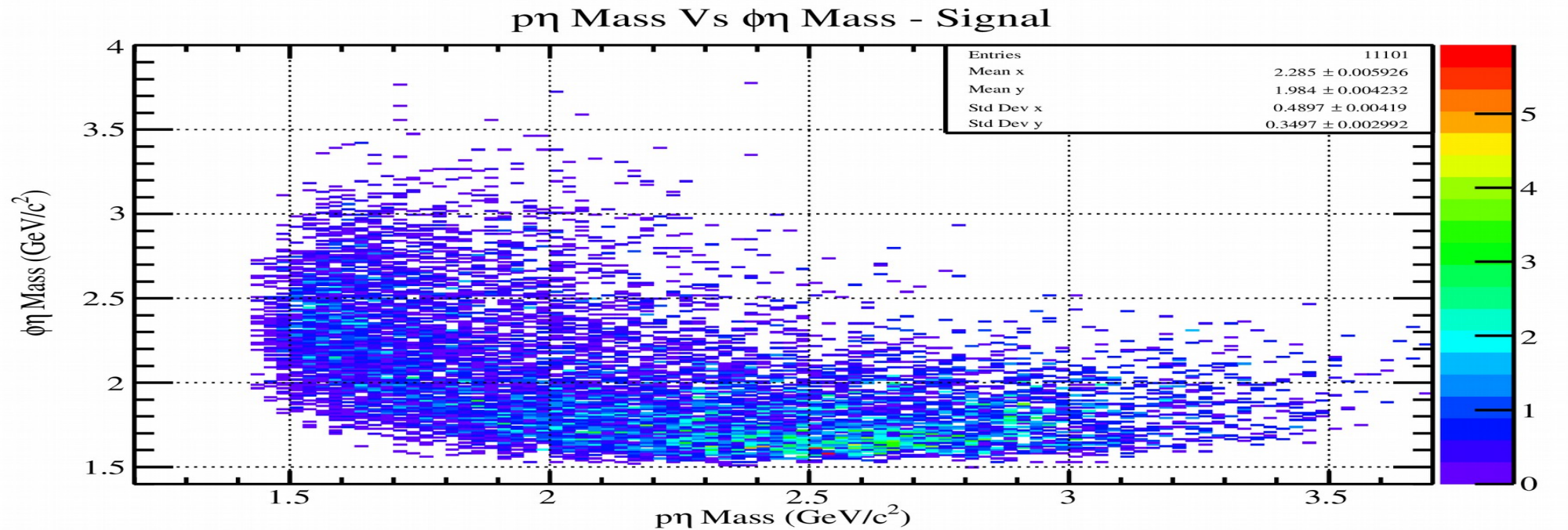
p η Mass - Signal



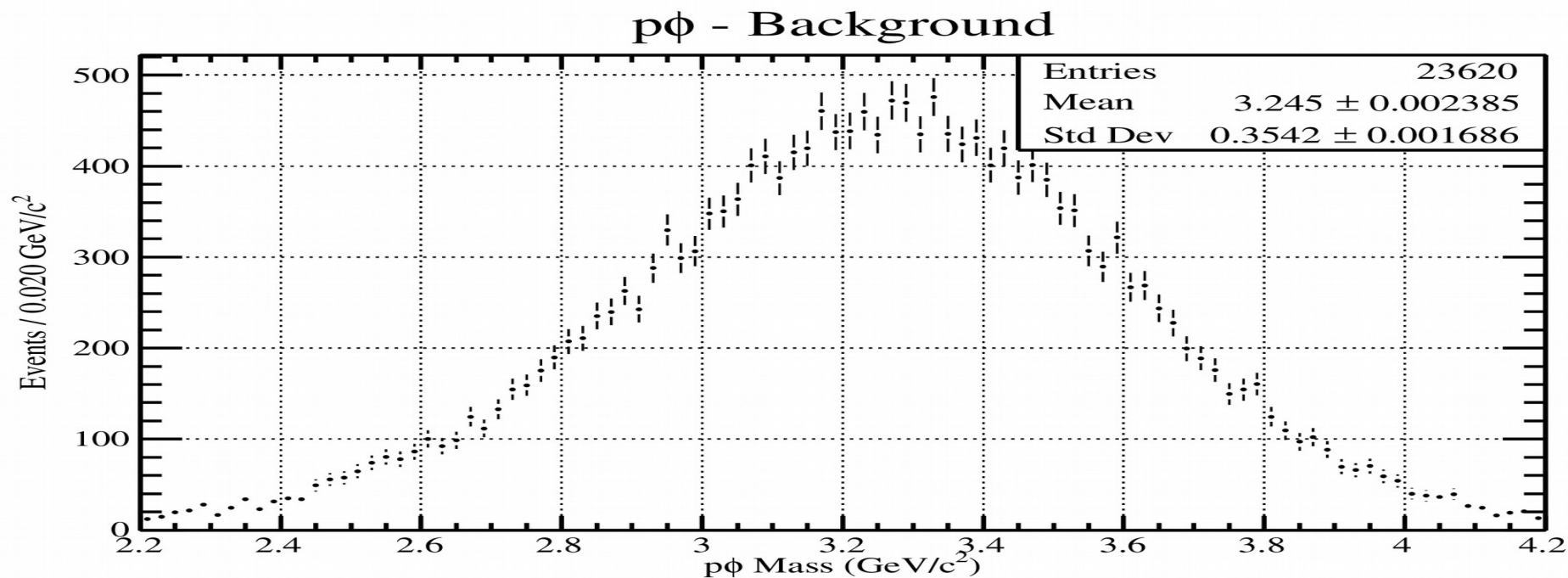
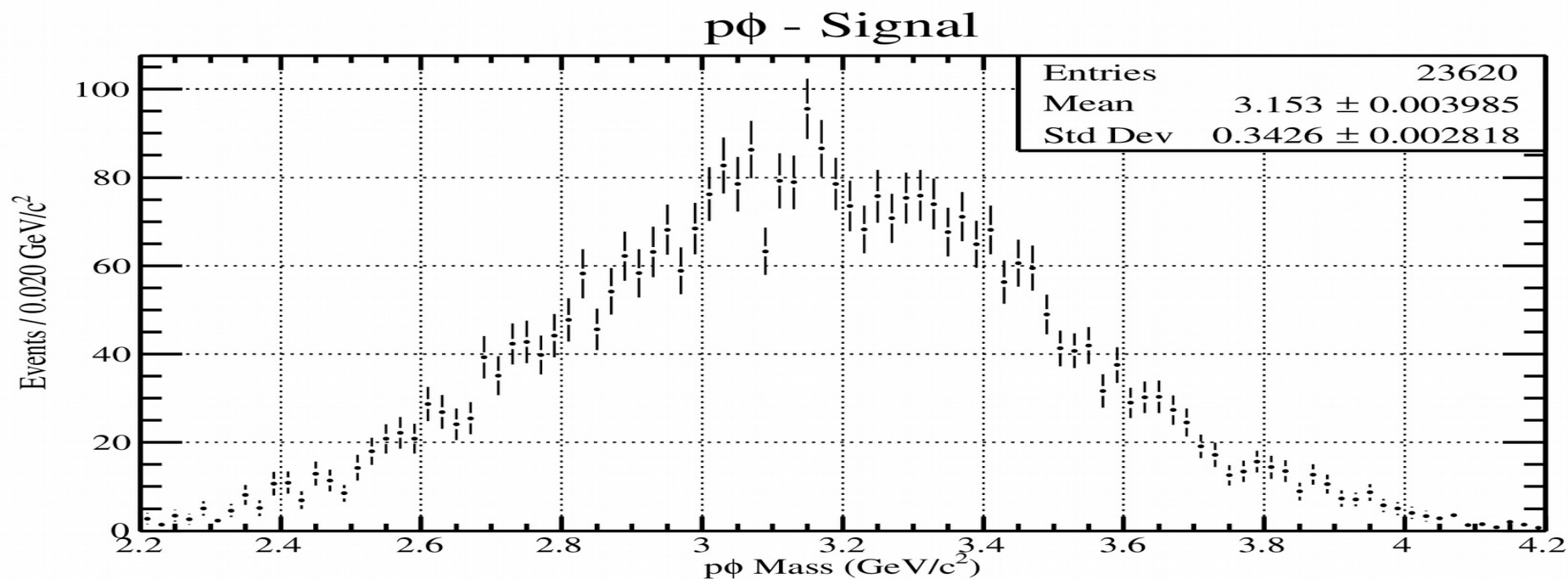
p η Mass - Background



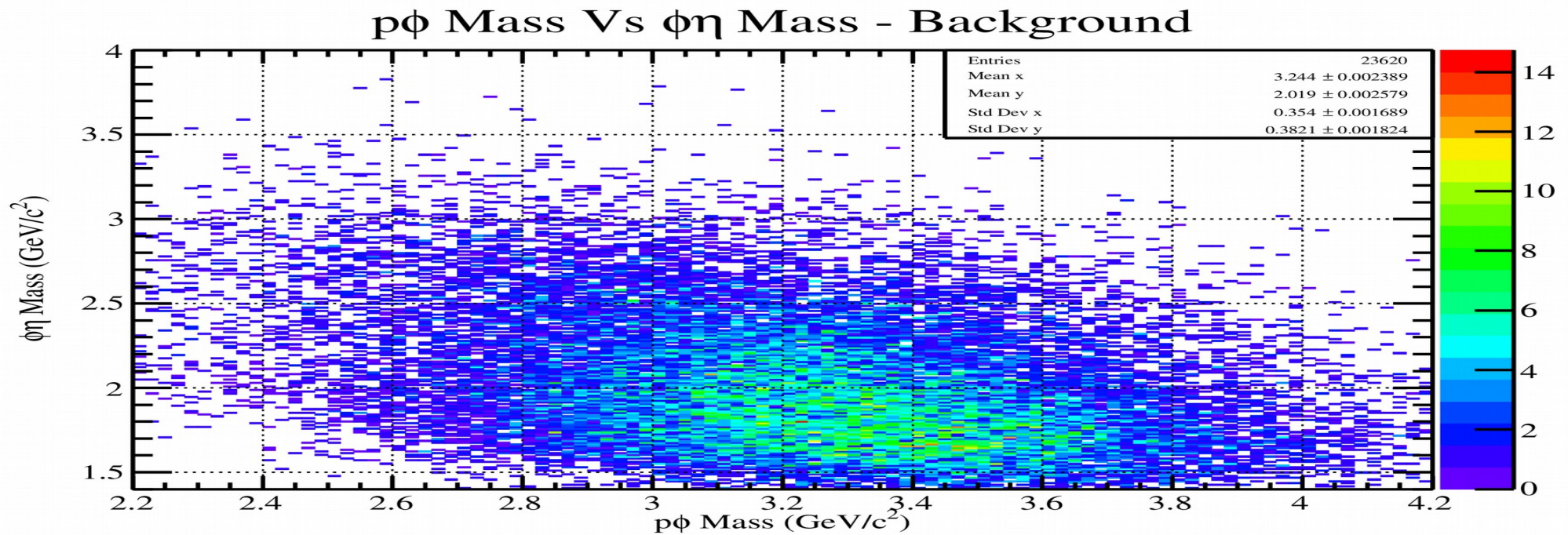
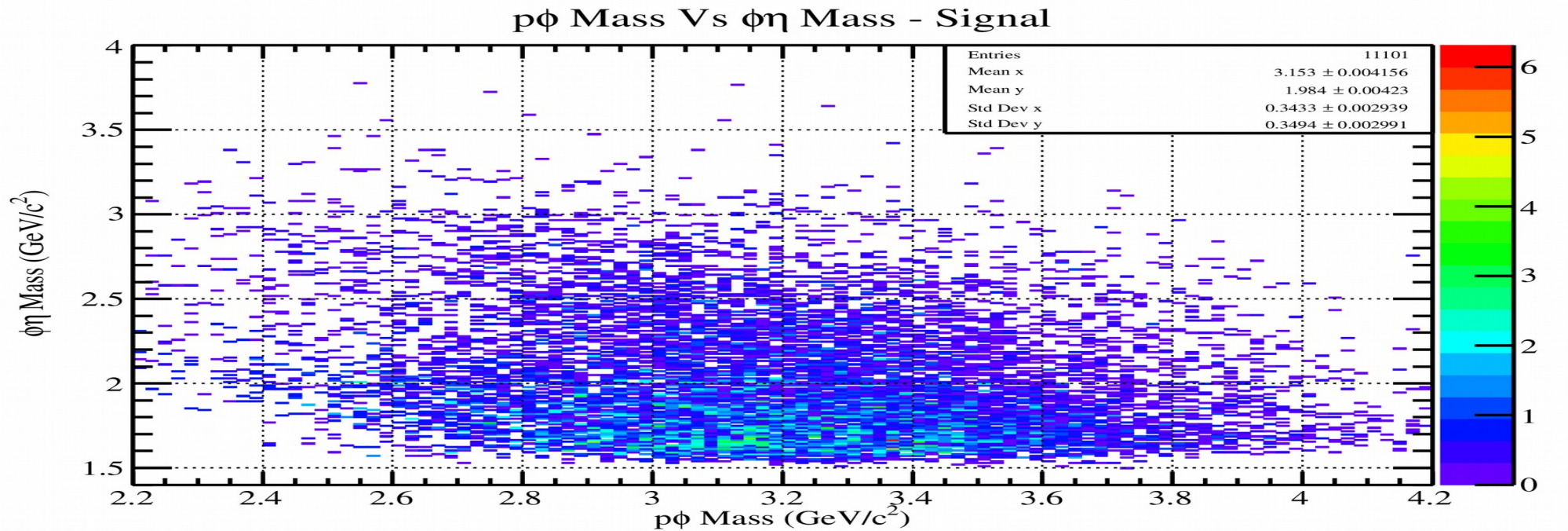
New PhiEta Vs PEta: Qvalue



New PPhi: Qvalue

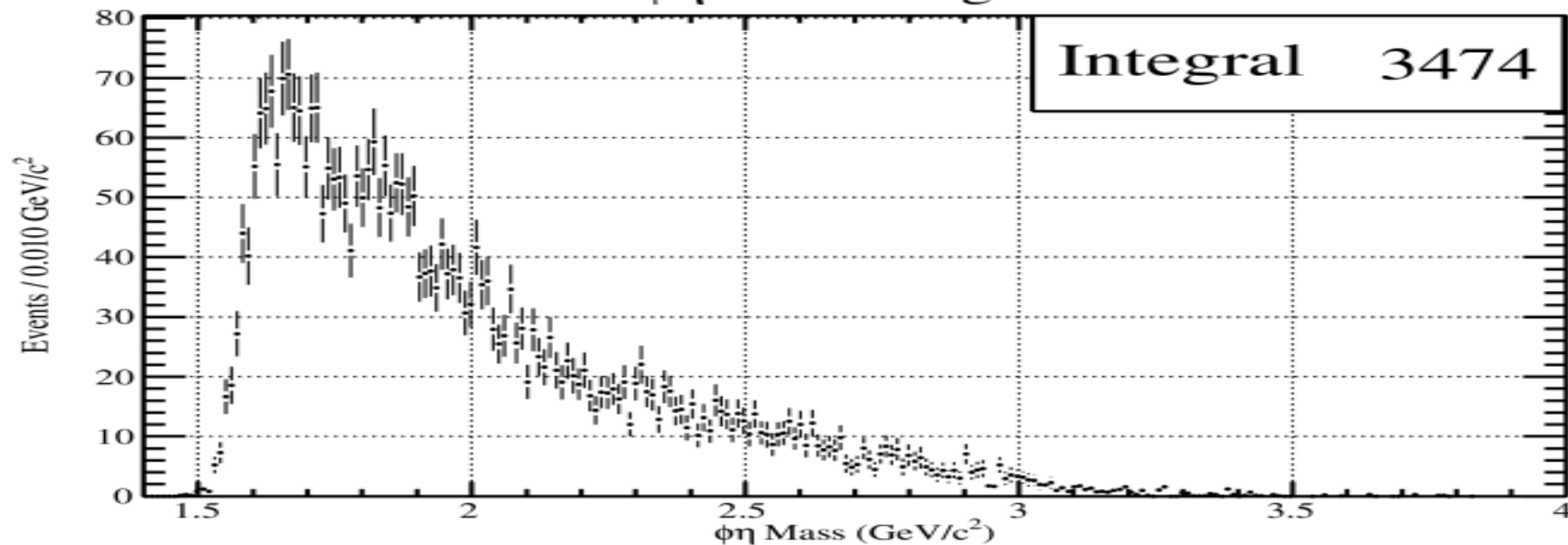


New PhiEta Vs PPhi: Qvalue

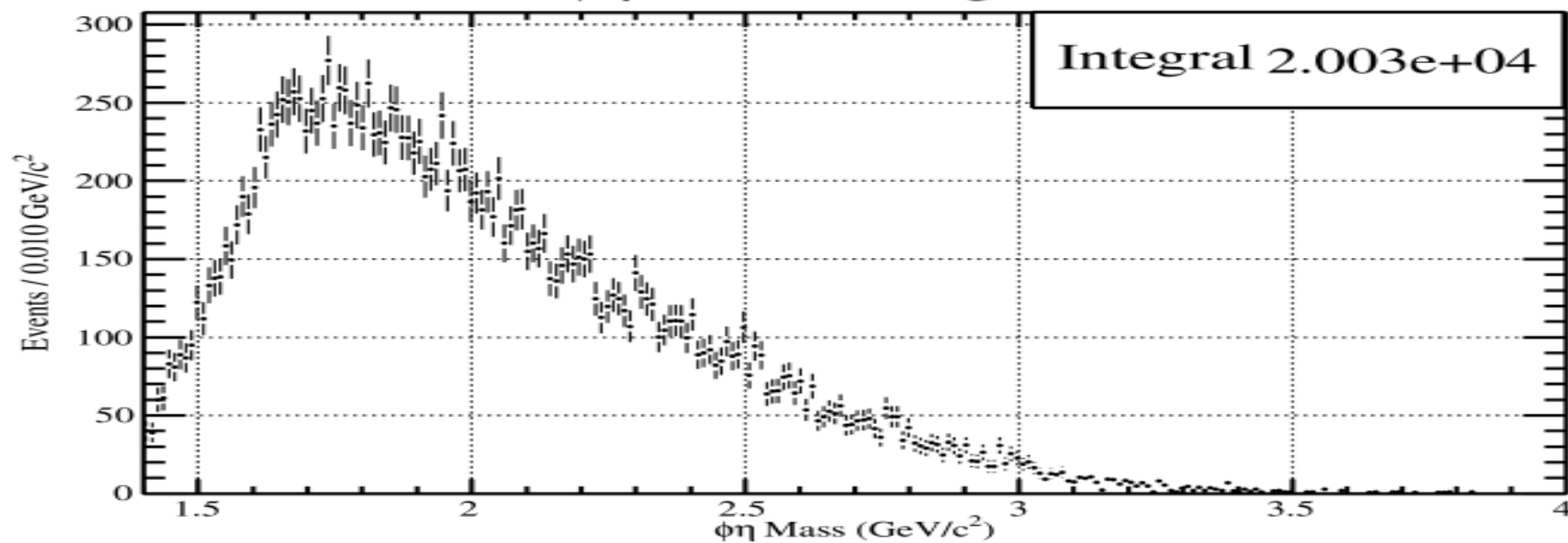


New PhiEta: Qvalue

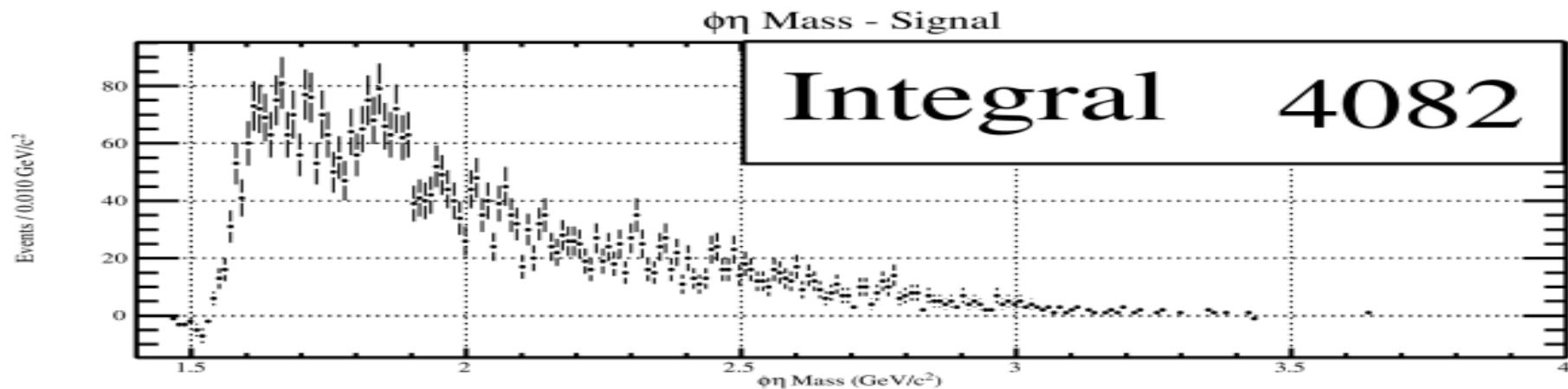
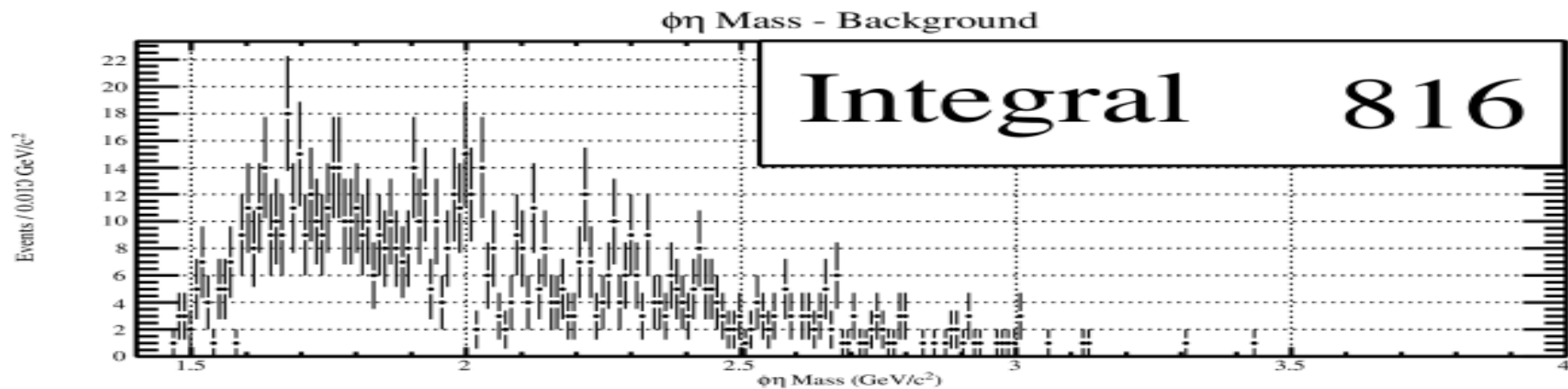
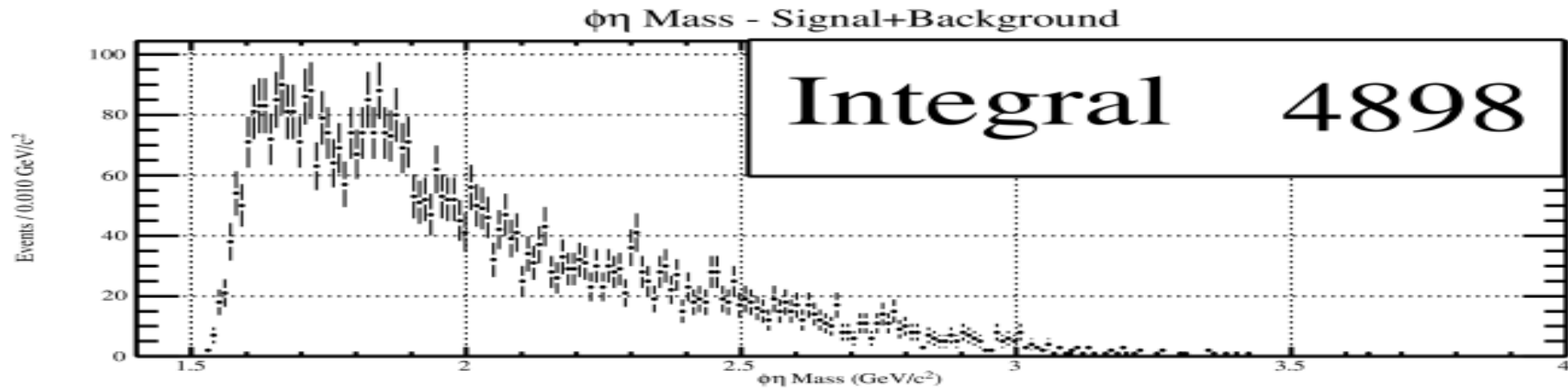
$\phi\eta$ Mass - Signal



$\phi\eta$ Mass - Background

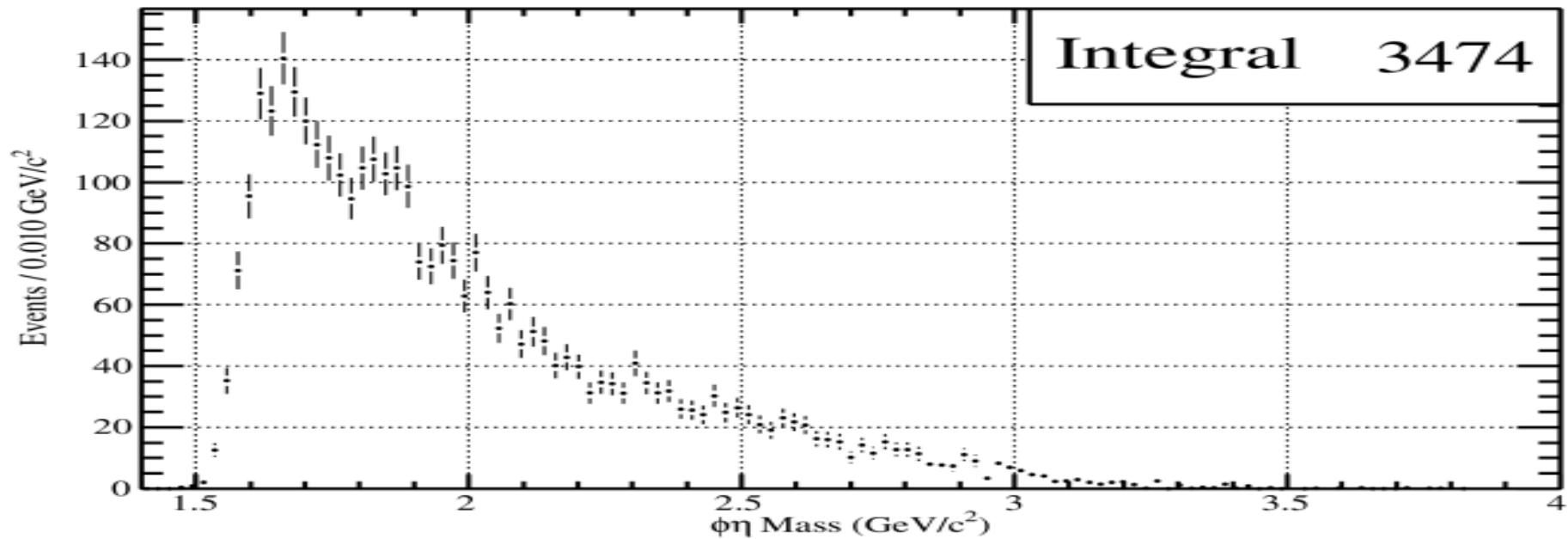


New PhiEta: Elliptical Sub

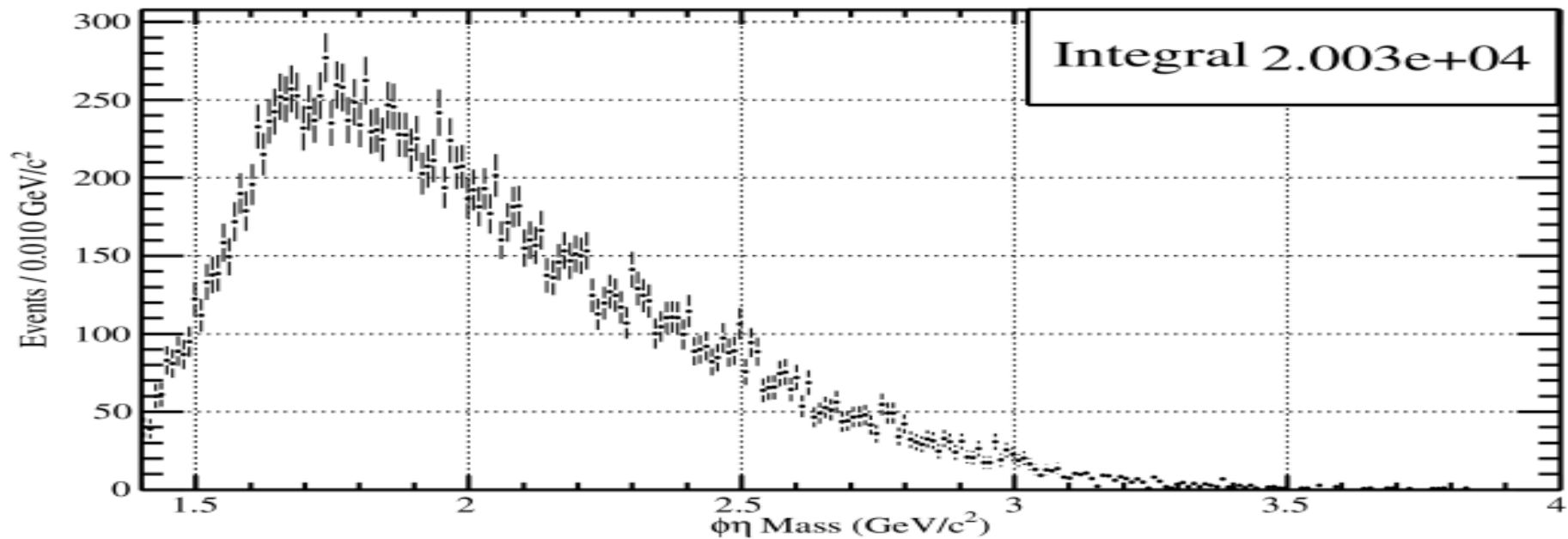


New PhiEta, Bigger Bins: Qvalue

$\phi\eta$ Mass - Signal



$\phi\eta$ Mass - Background



New PhiEta, Bigger Bins: Elliptical Sub

