CL Distributions not flat

$\gamma p \rightarrow \omega p$ **Vertex Constraint and mγγ = mπ0**

Look at MC

Including each fit per event
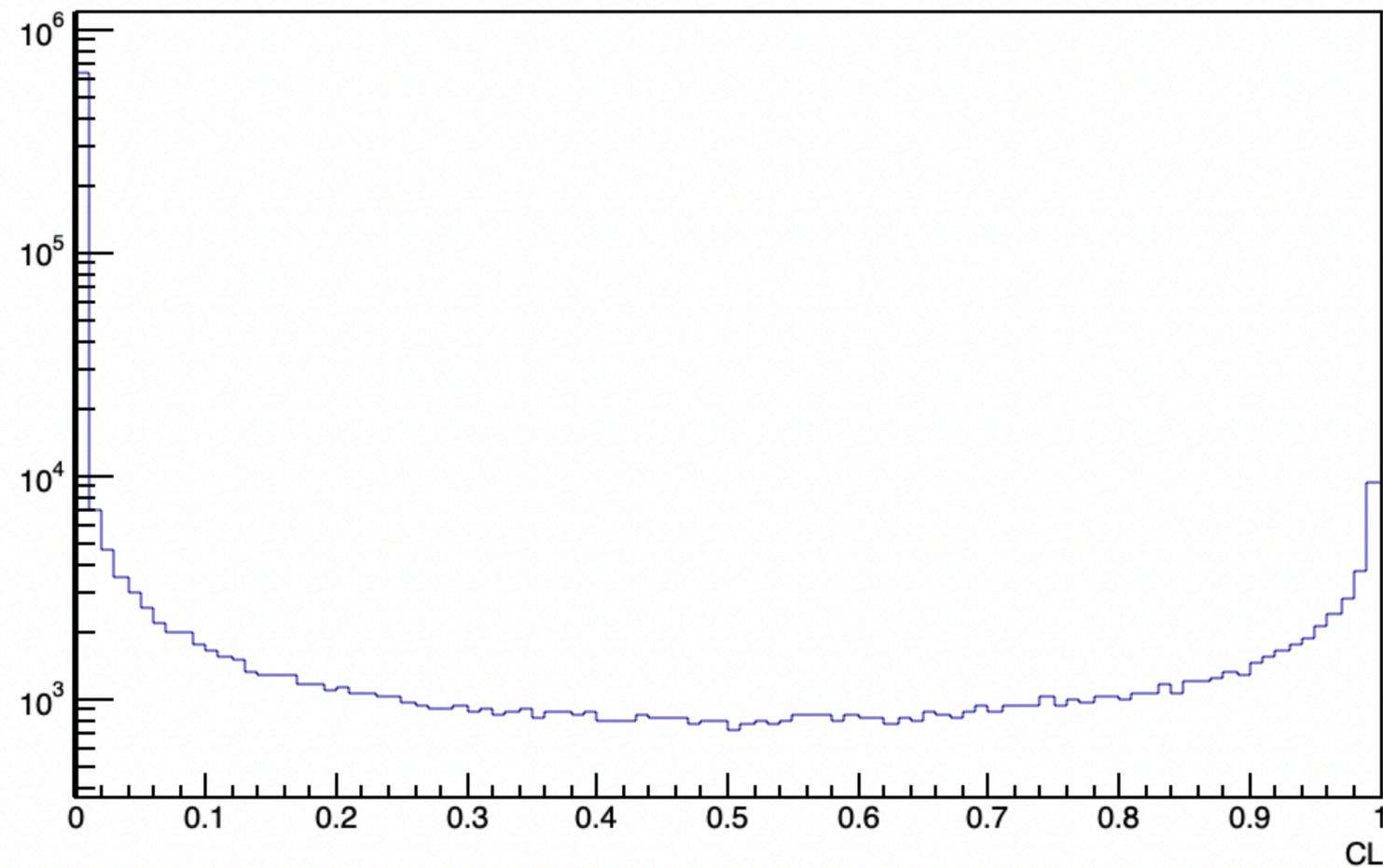
### Including only one fit per event
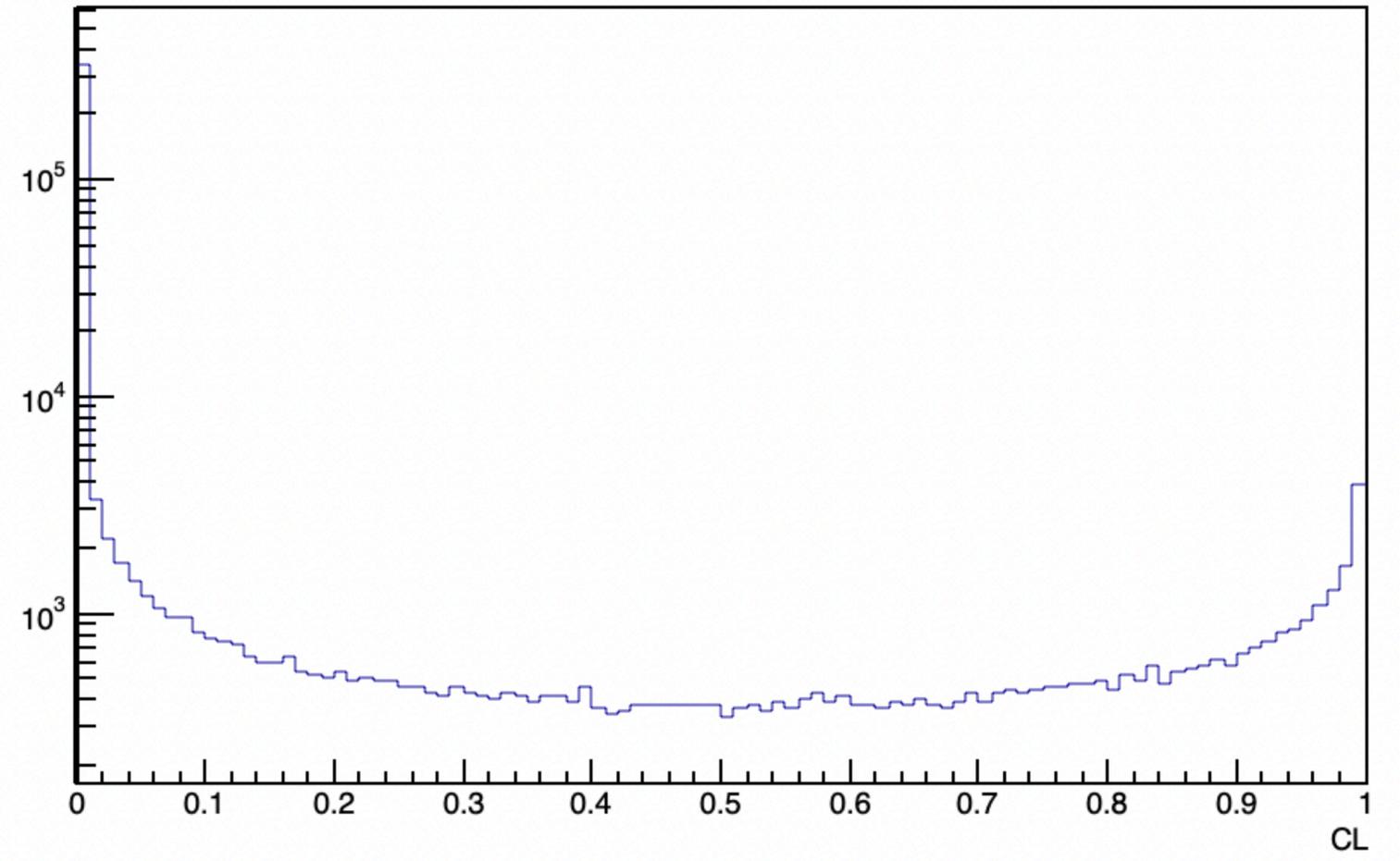
Missing mass after cuts

**All Hypotheses with CL > 0.01**
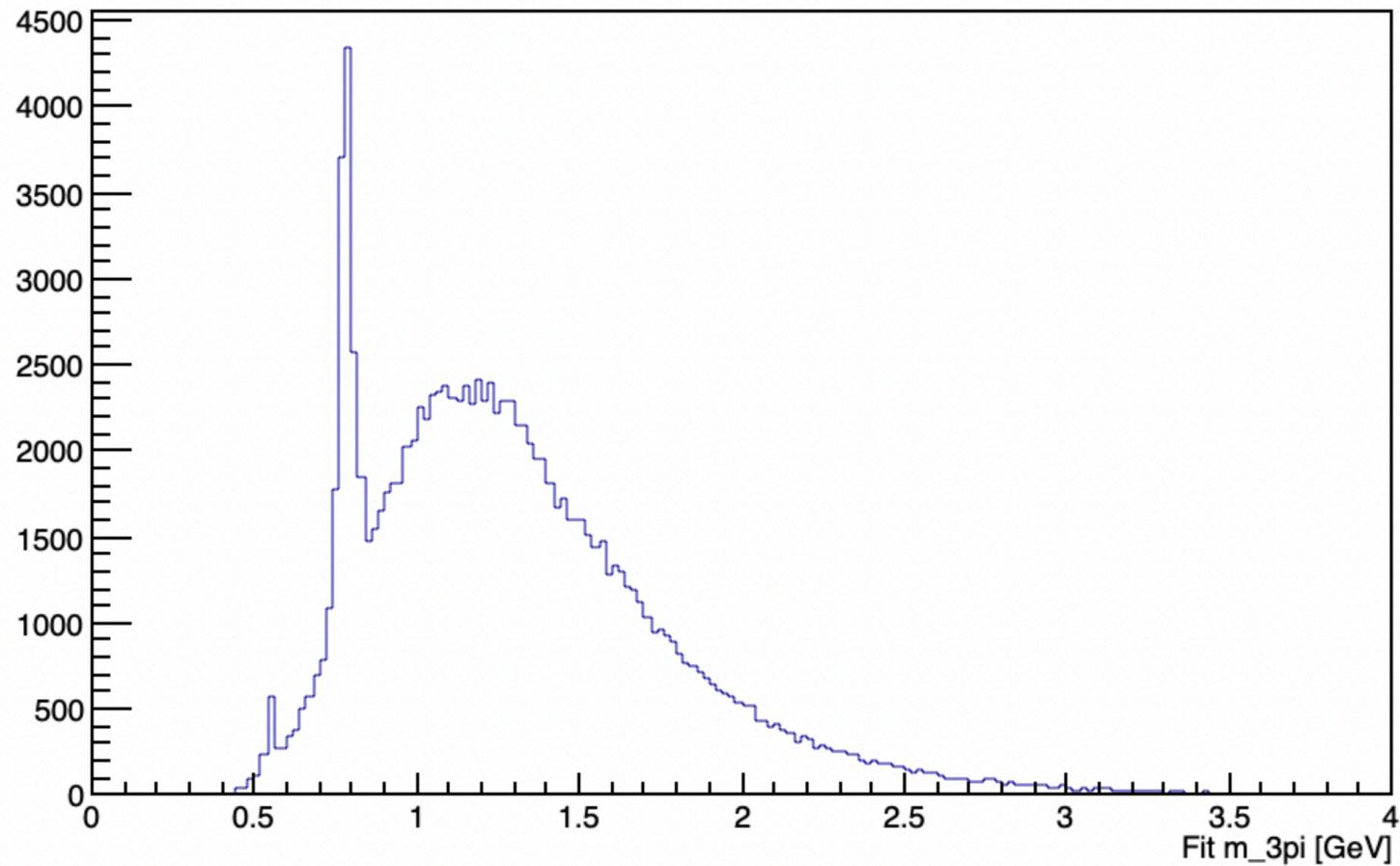
After Vertex, Shower, π0 Mass Cuts
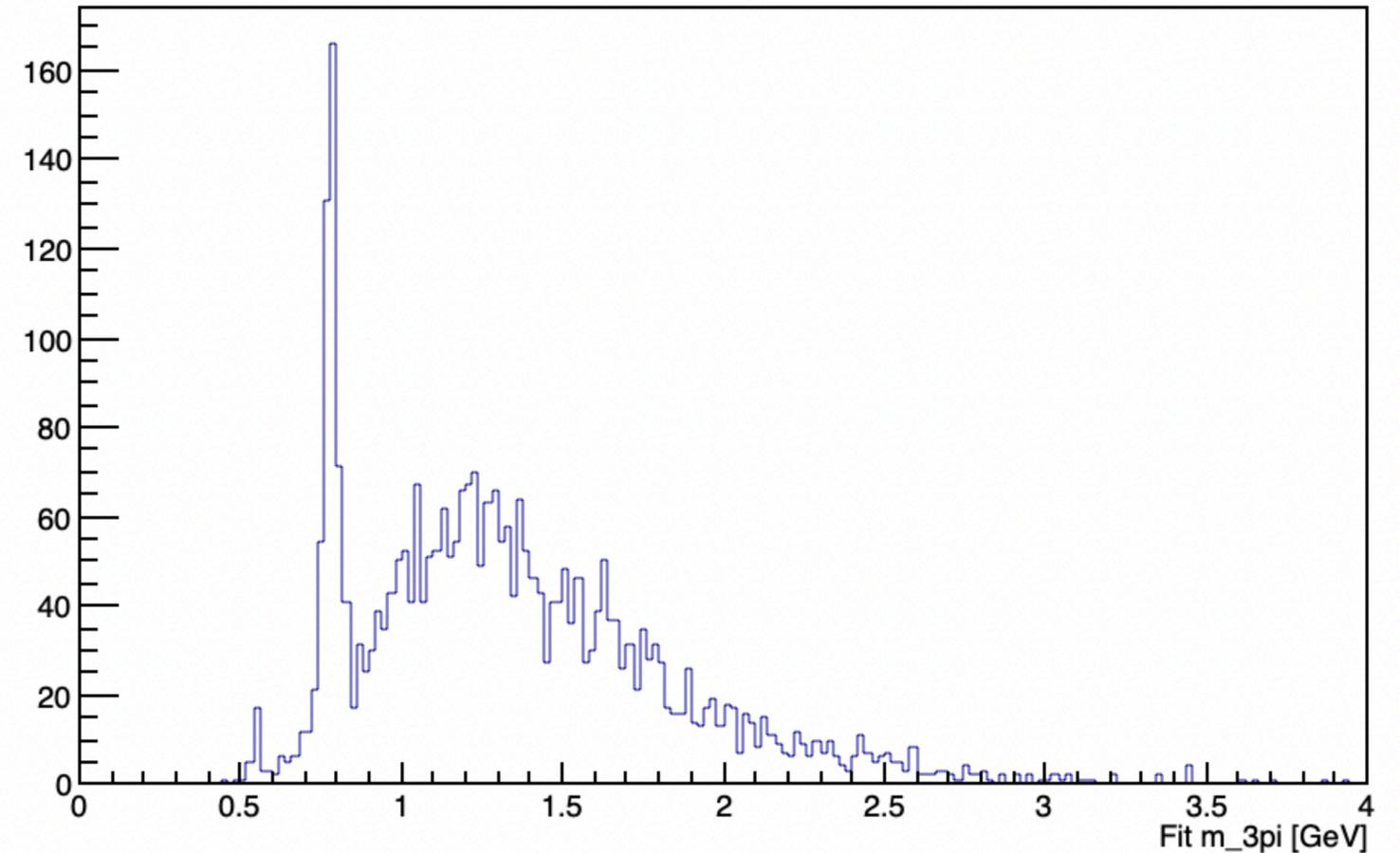
Missing momentum after mass cut
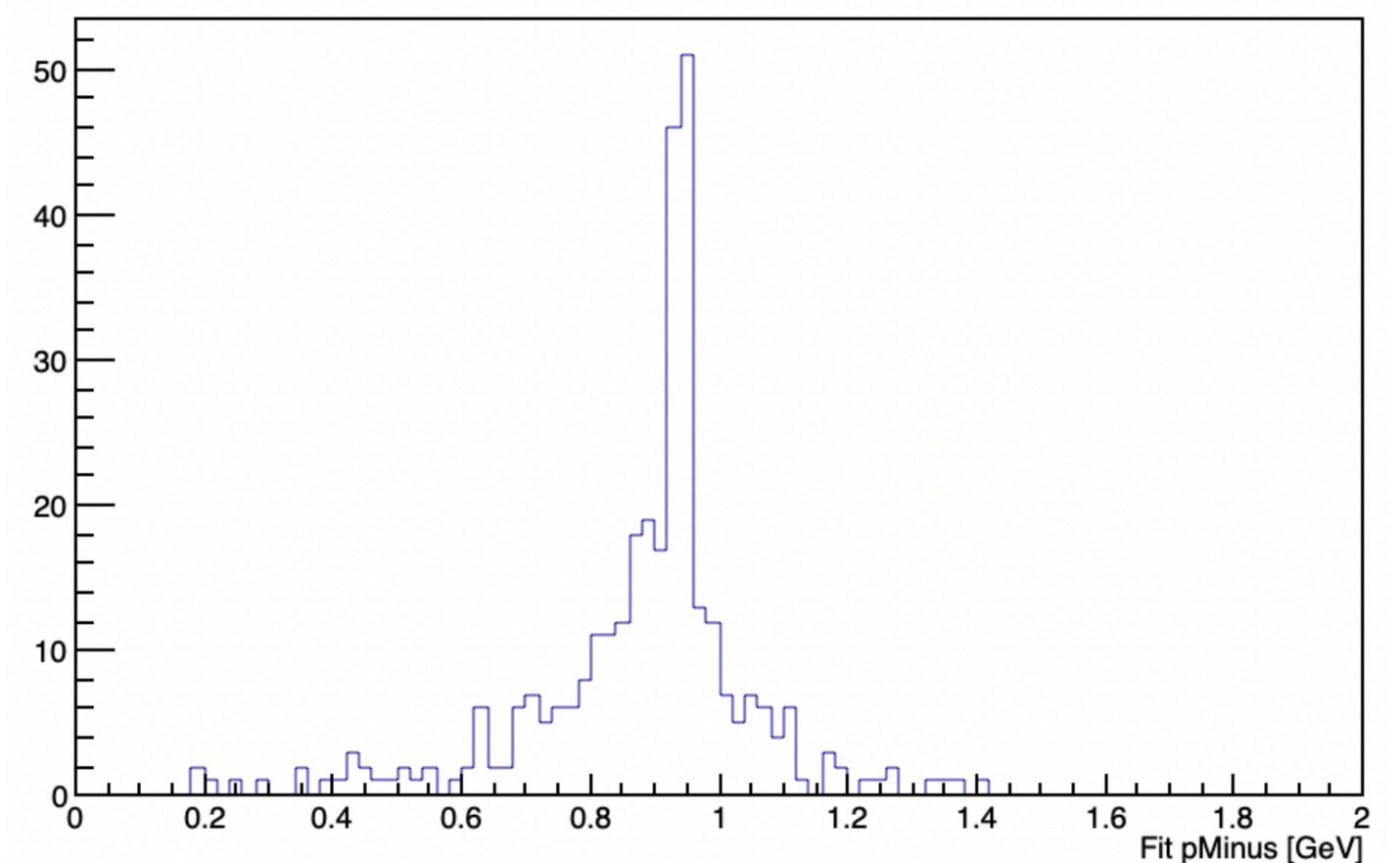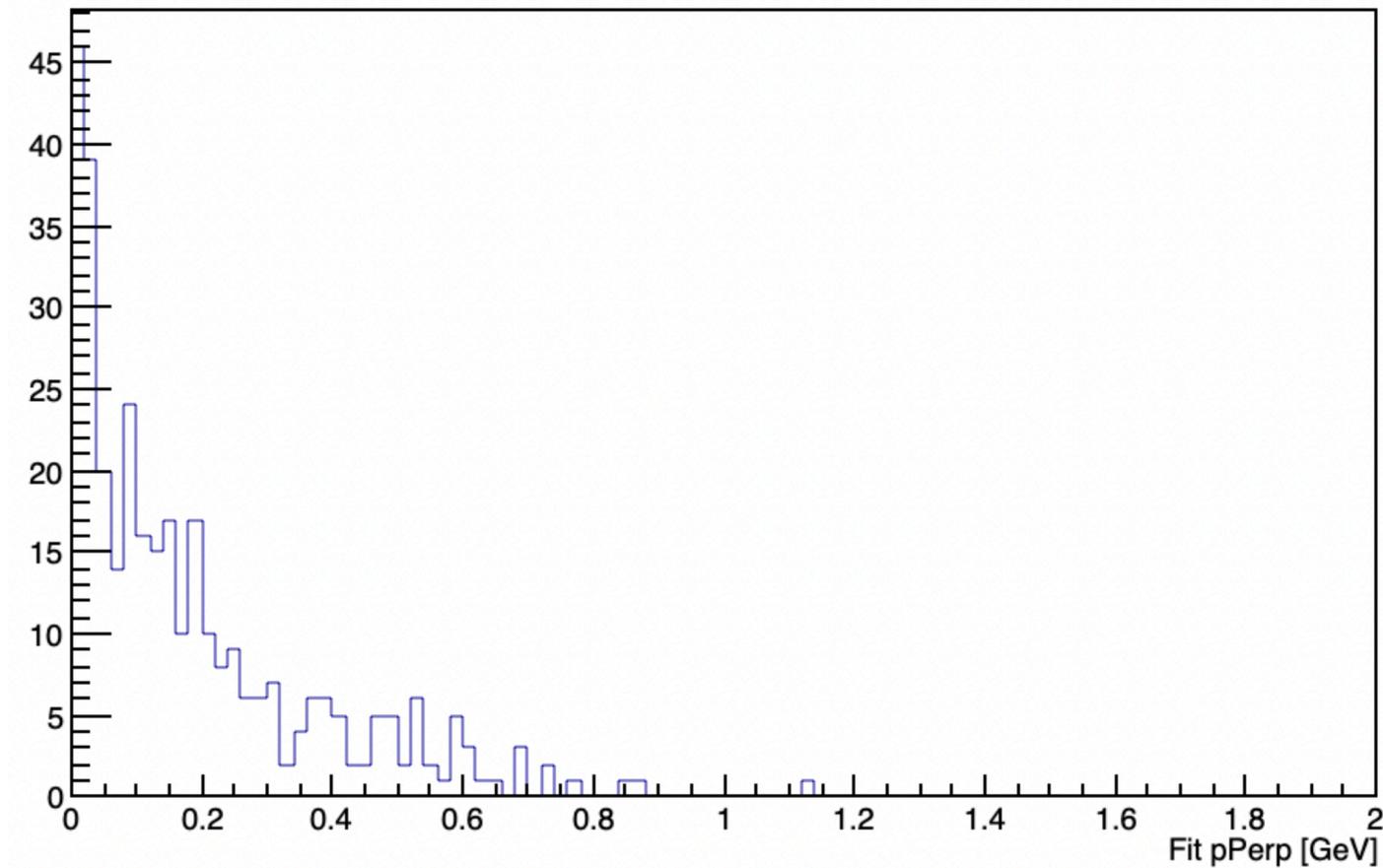
Missing momentum after mass cut
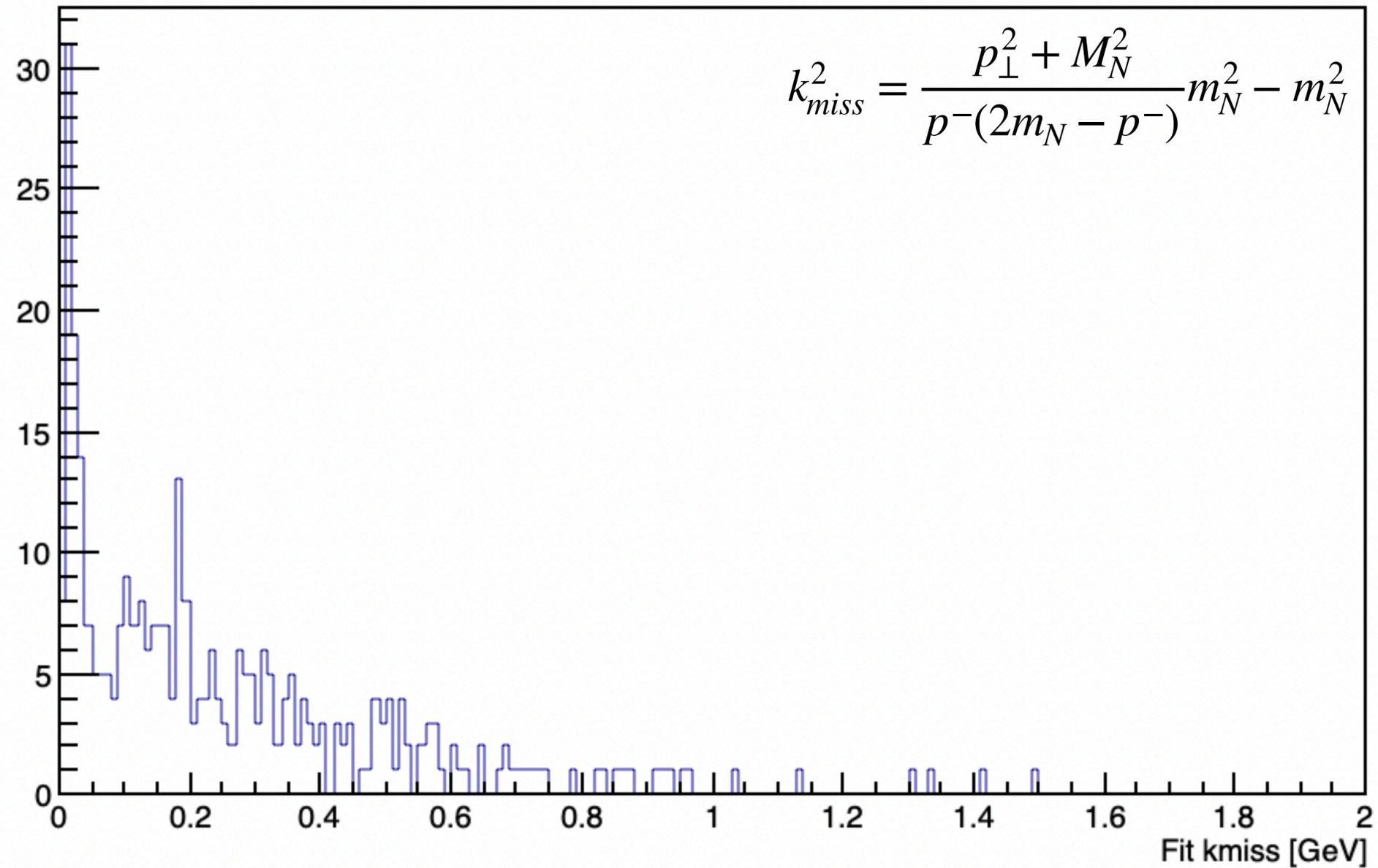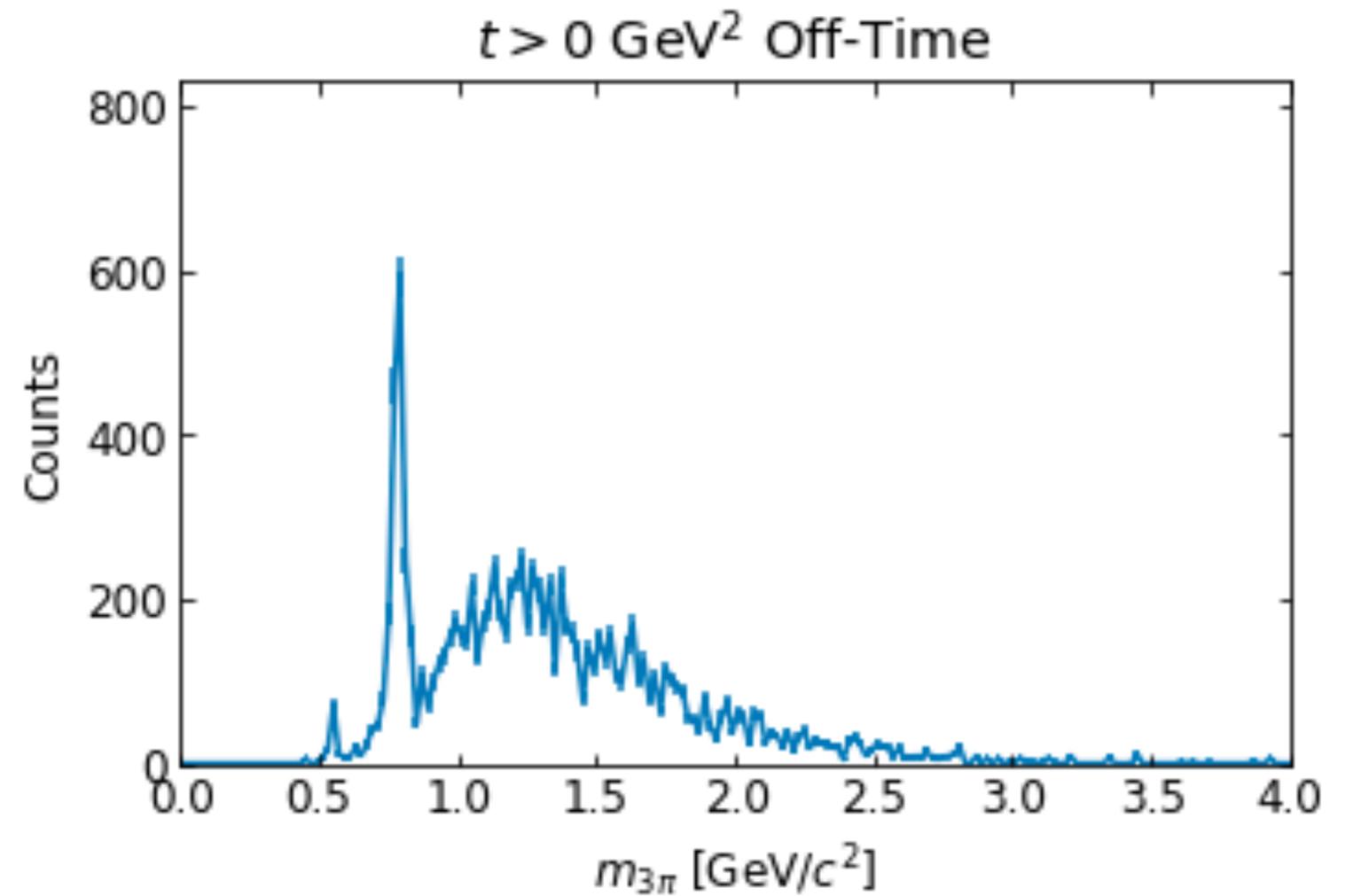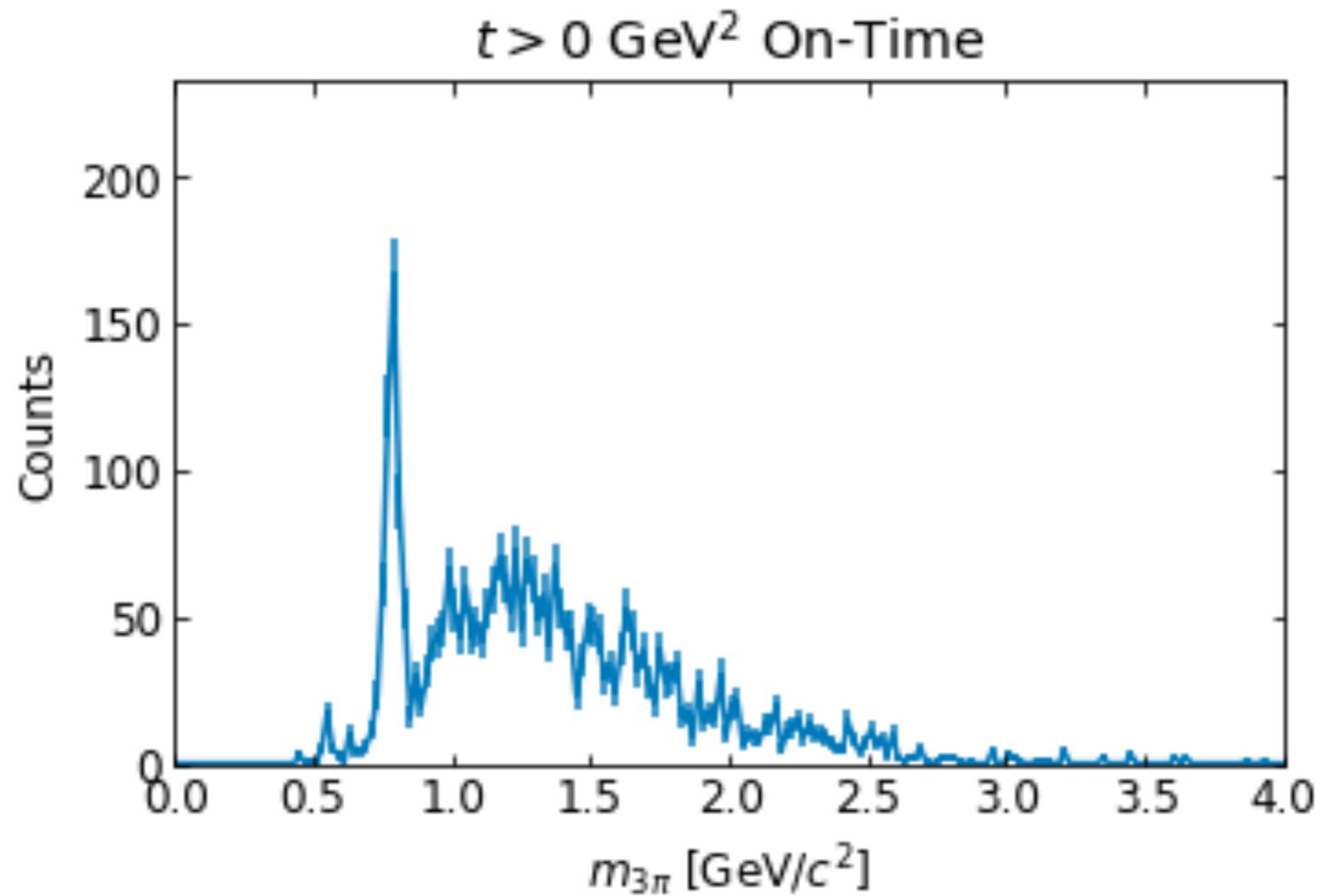
$$k_{miss}^2 = \frac{p_\perp^2 + M_N^2}{p^-(2m_N - p^-)}m_N^2 - m_N^2$$

Fit kmiss [GeV]

Background increases slightly with $|t|$

# Background increases slightly with $|t|$

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Background increases slightly with k_{miss}

Background increases slightly with k_{miss}

Background increases slightly with k_{miss}

Background increases slightly with k_{miss}

Background increases slightly with k_{miss}

Background increases slightly with k_{miss}


$k_{miss} > 600$ MeV/c

Background increases slightly with k_{miss}

$k_{miss} > 800$ MeV/c
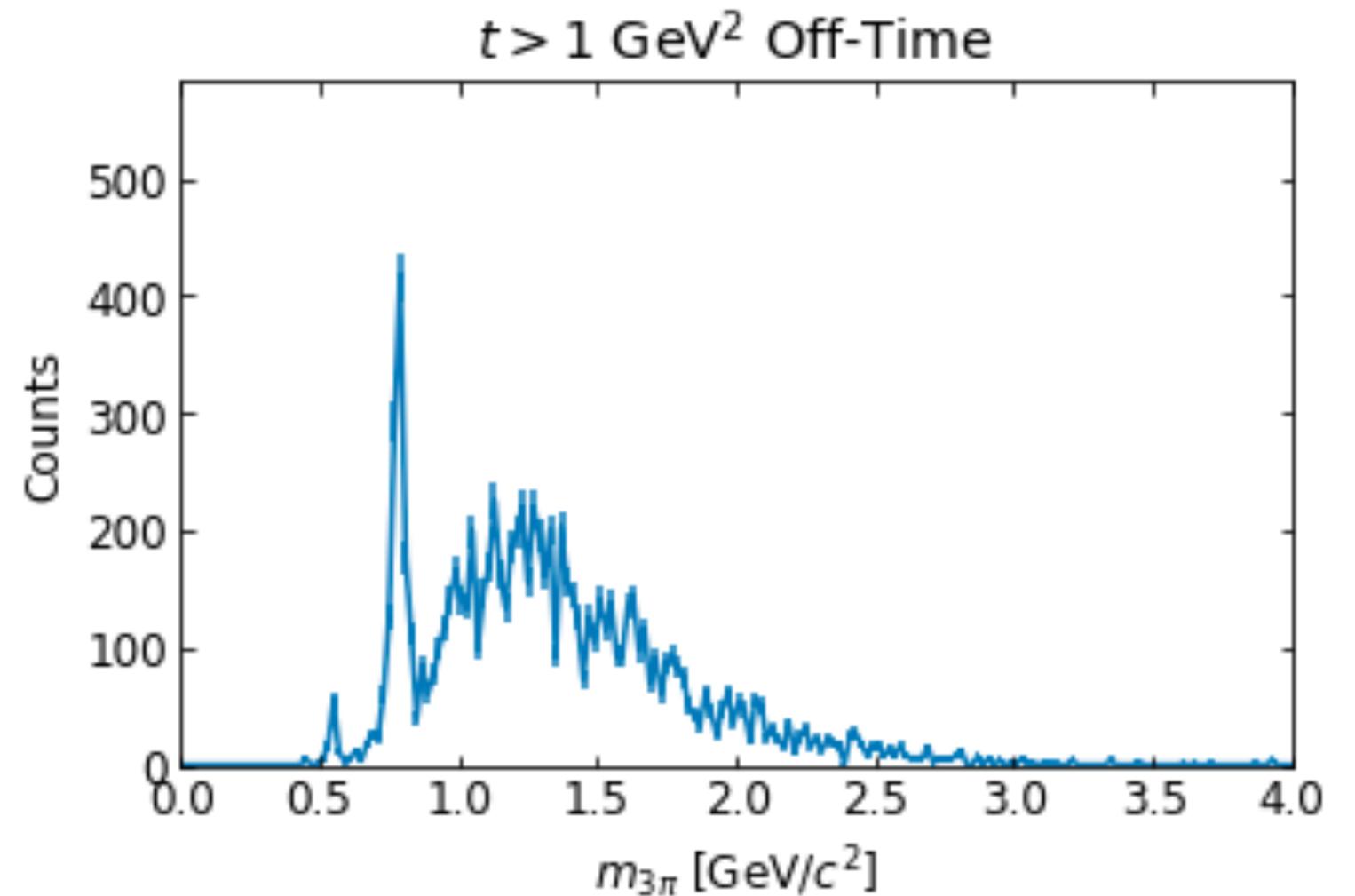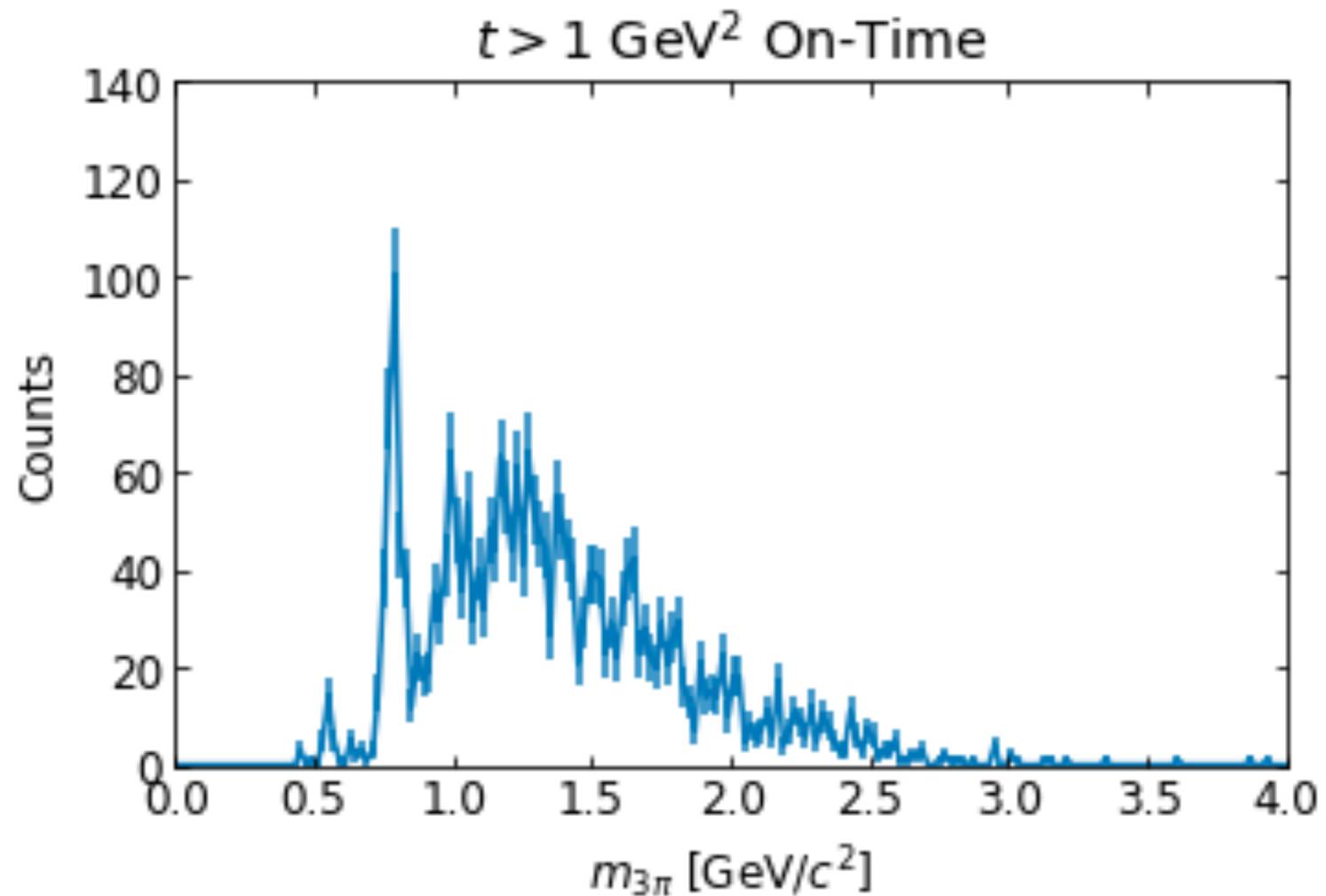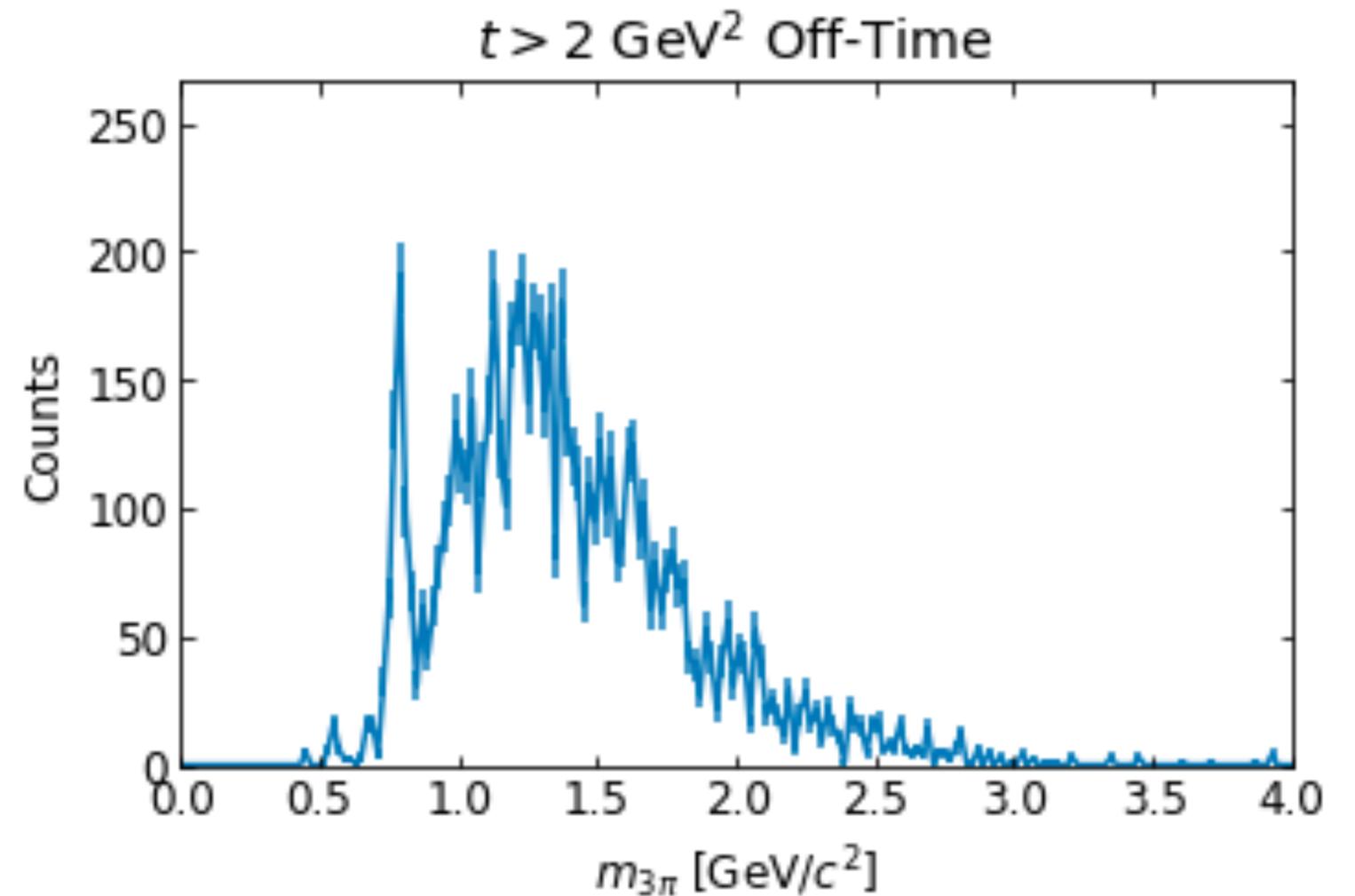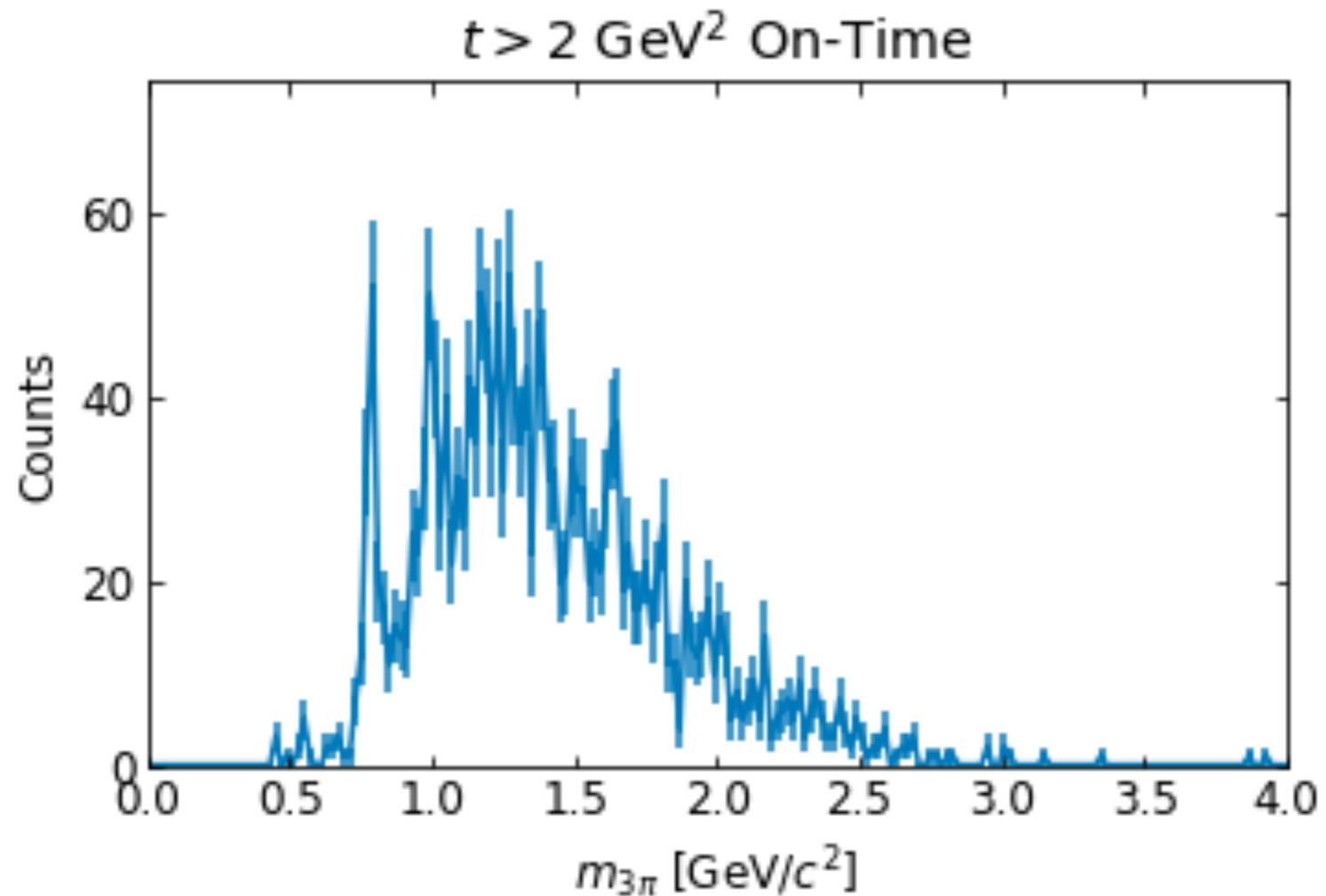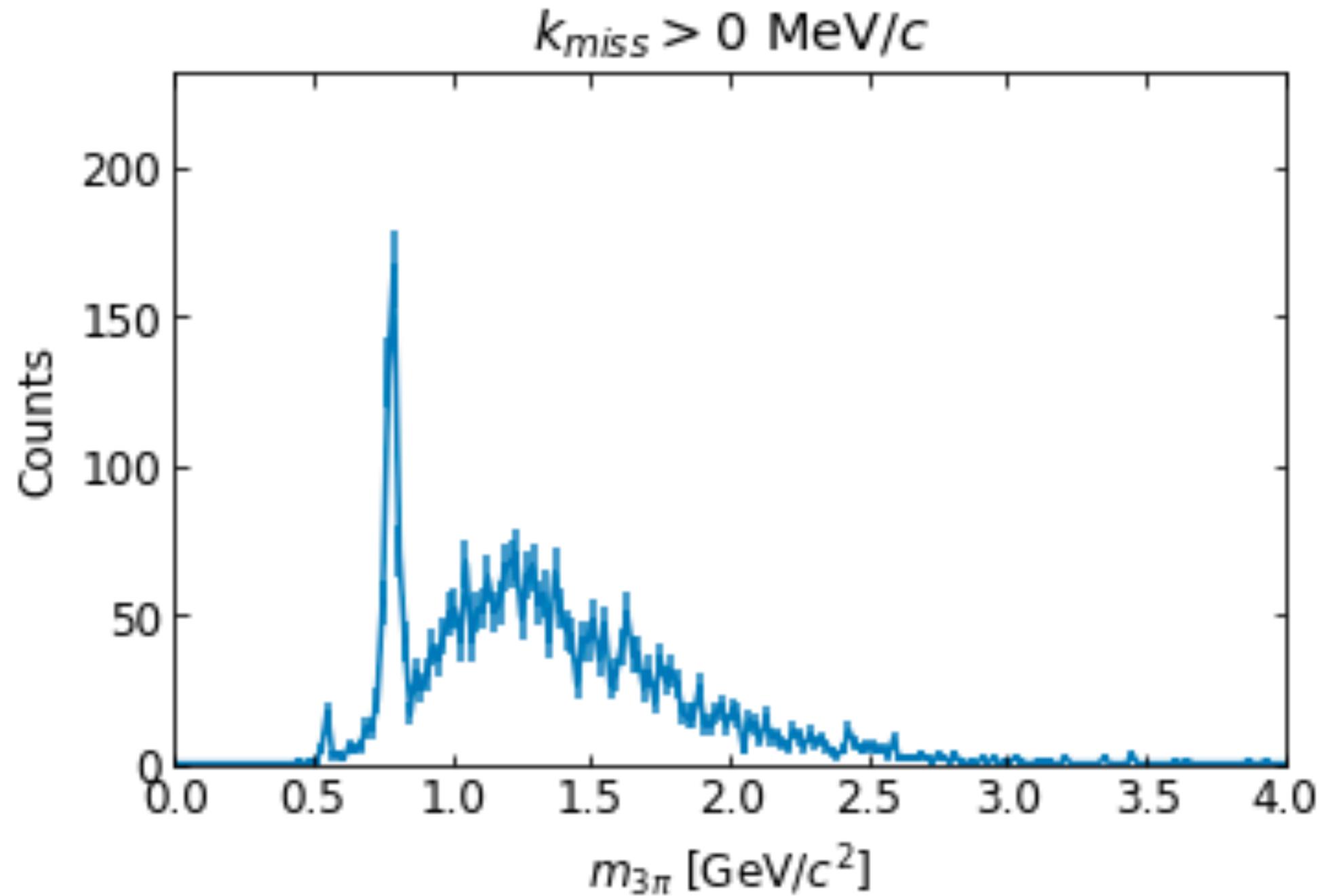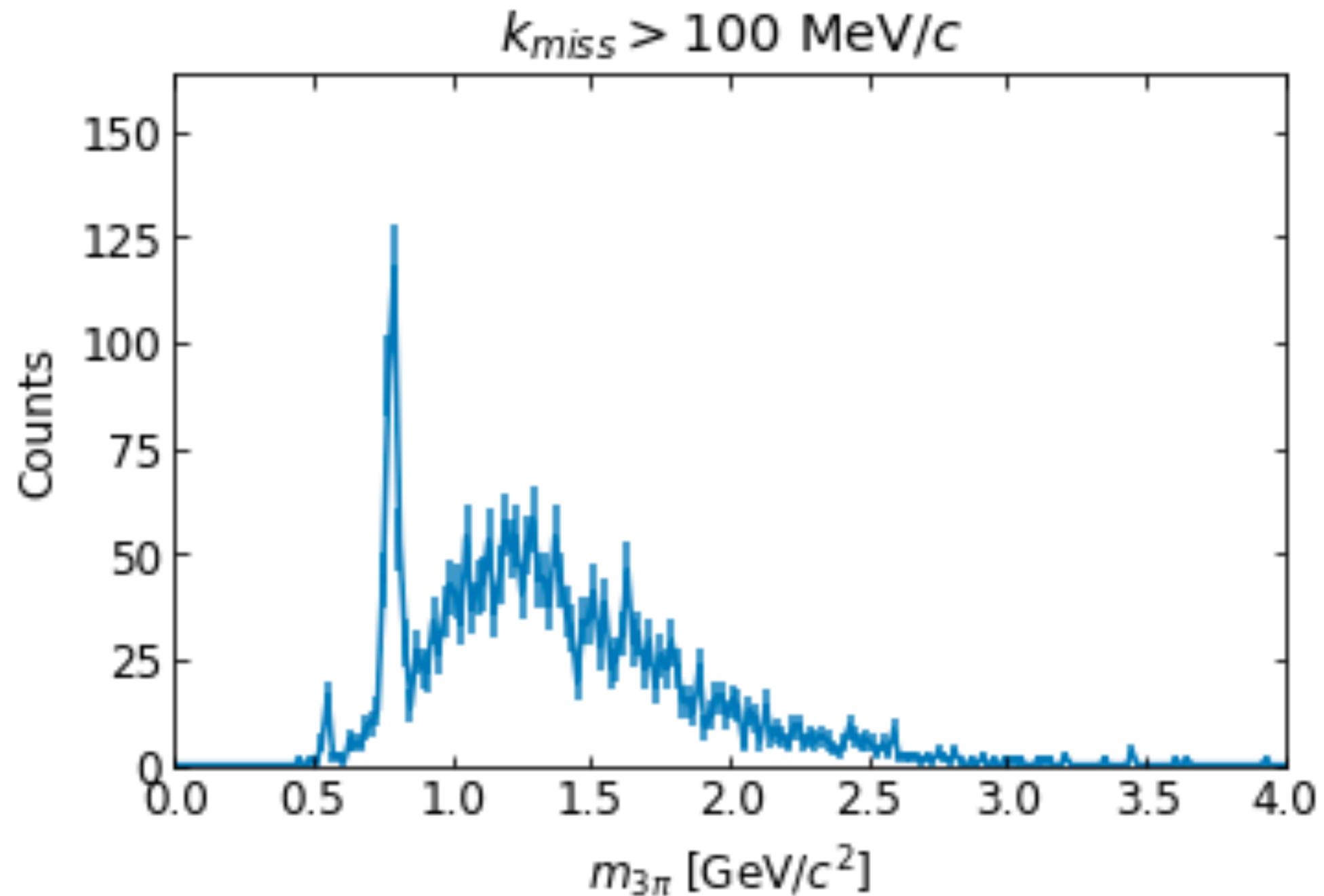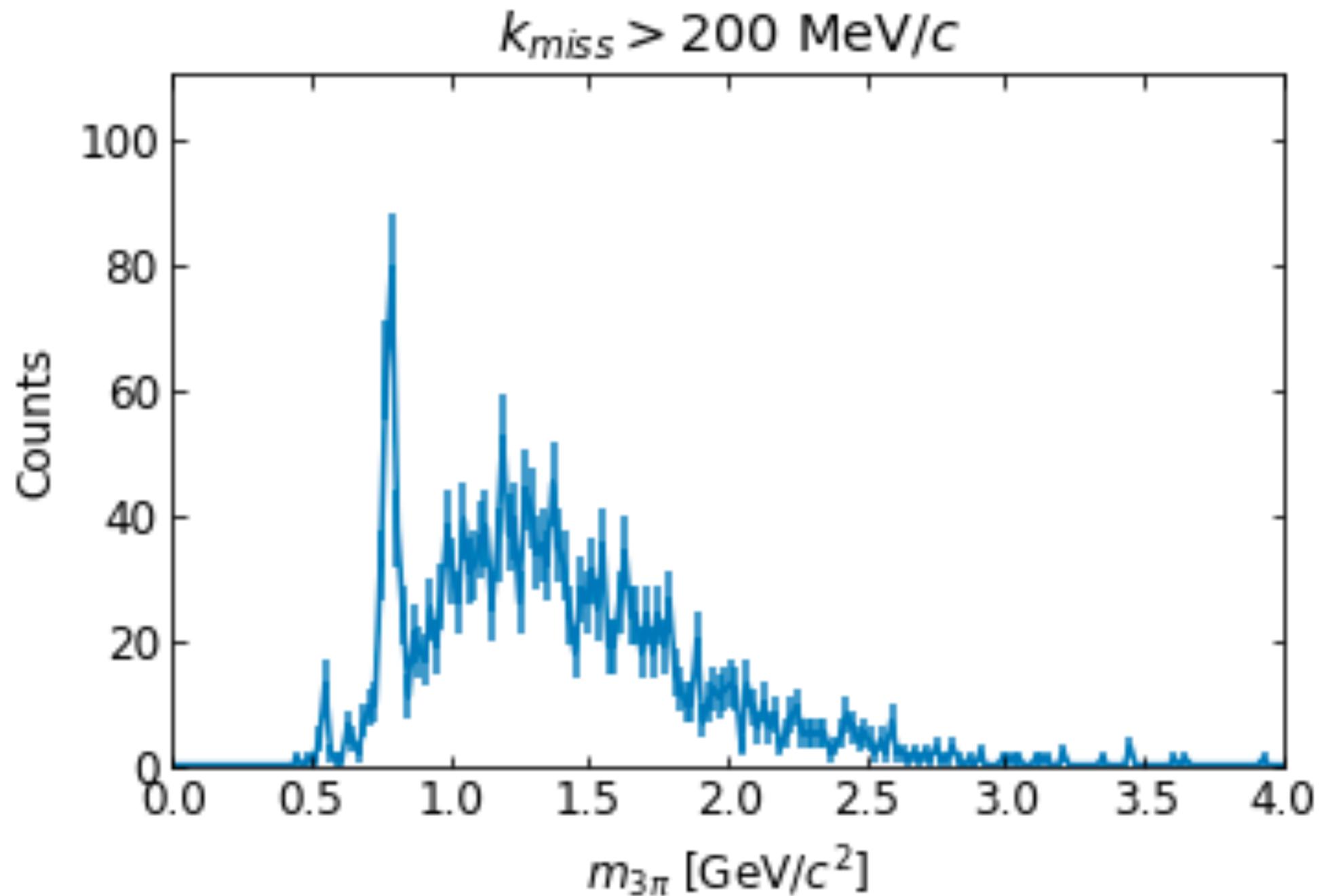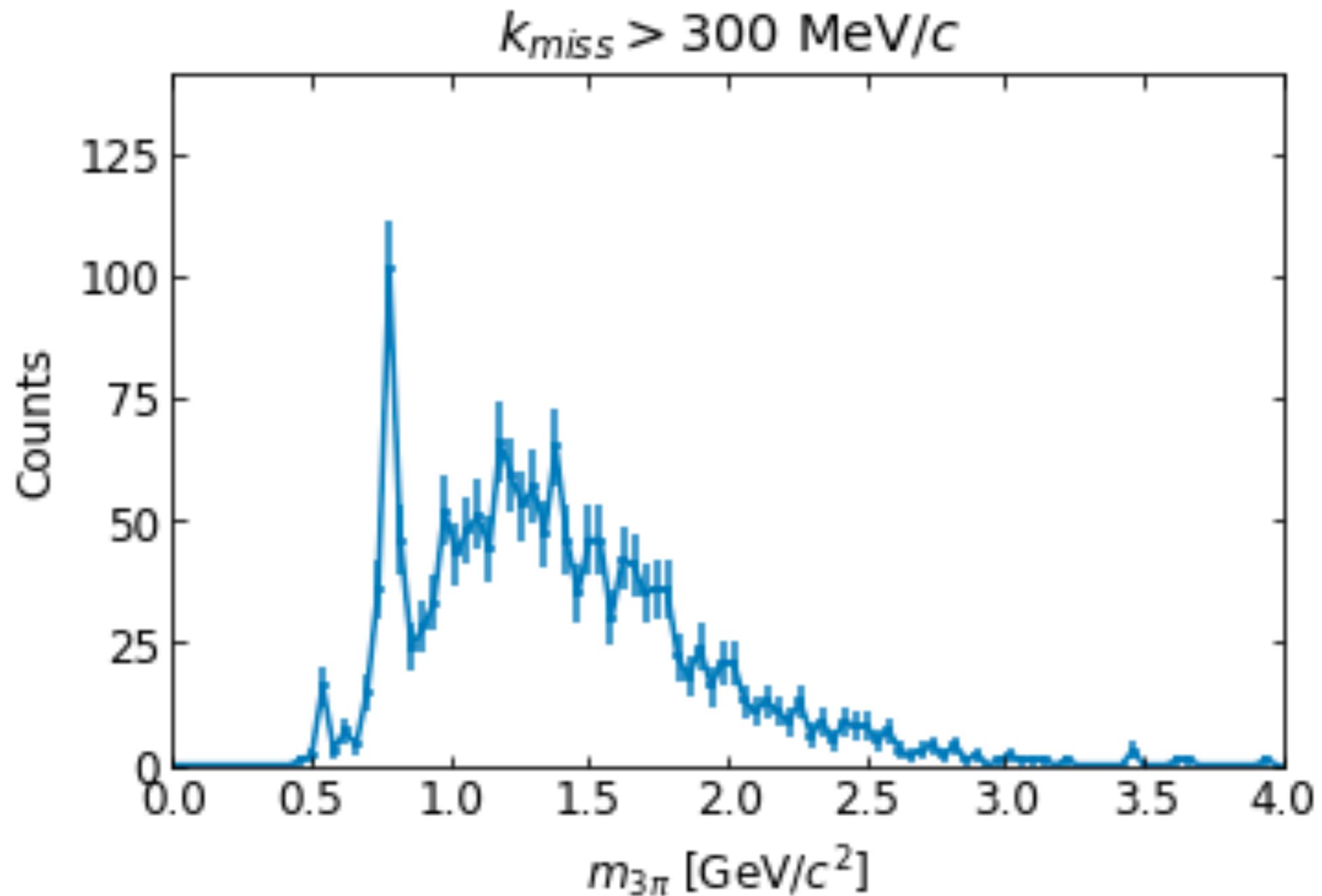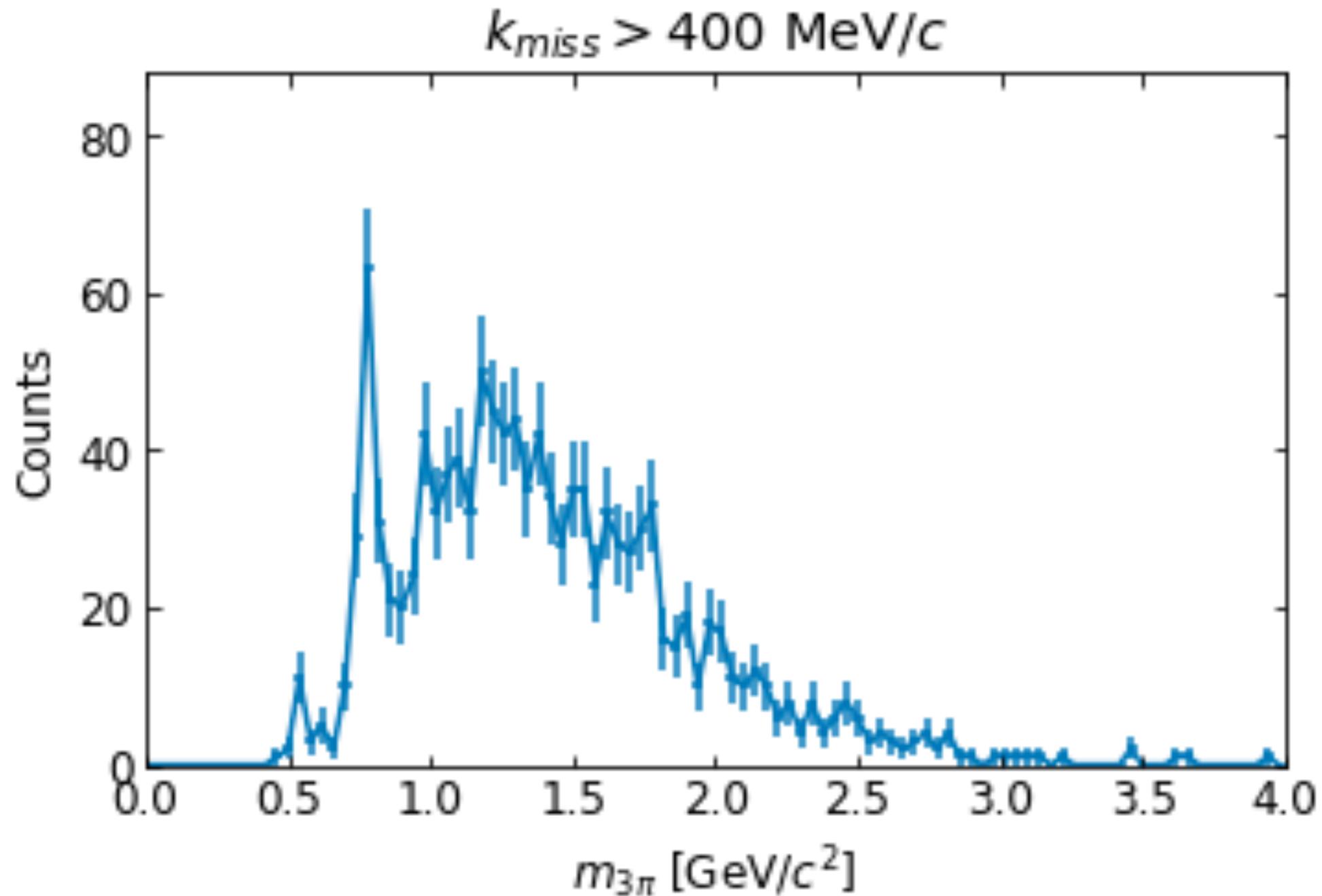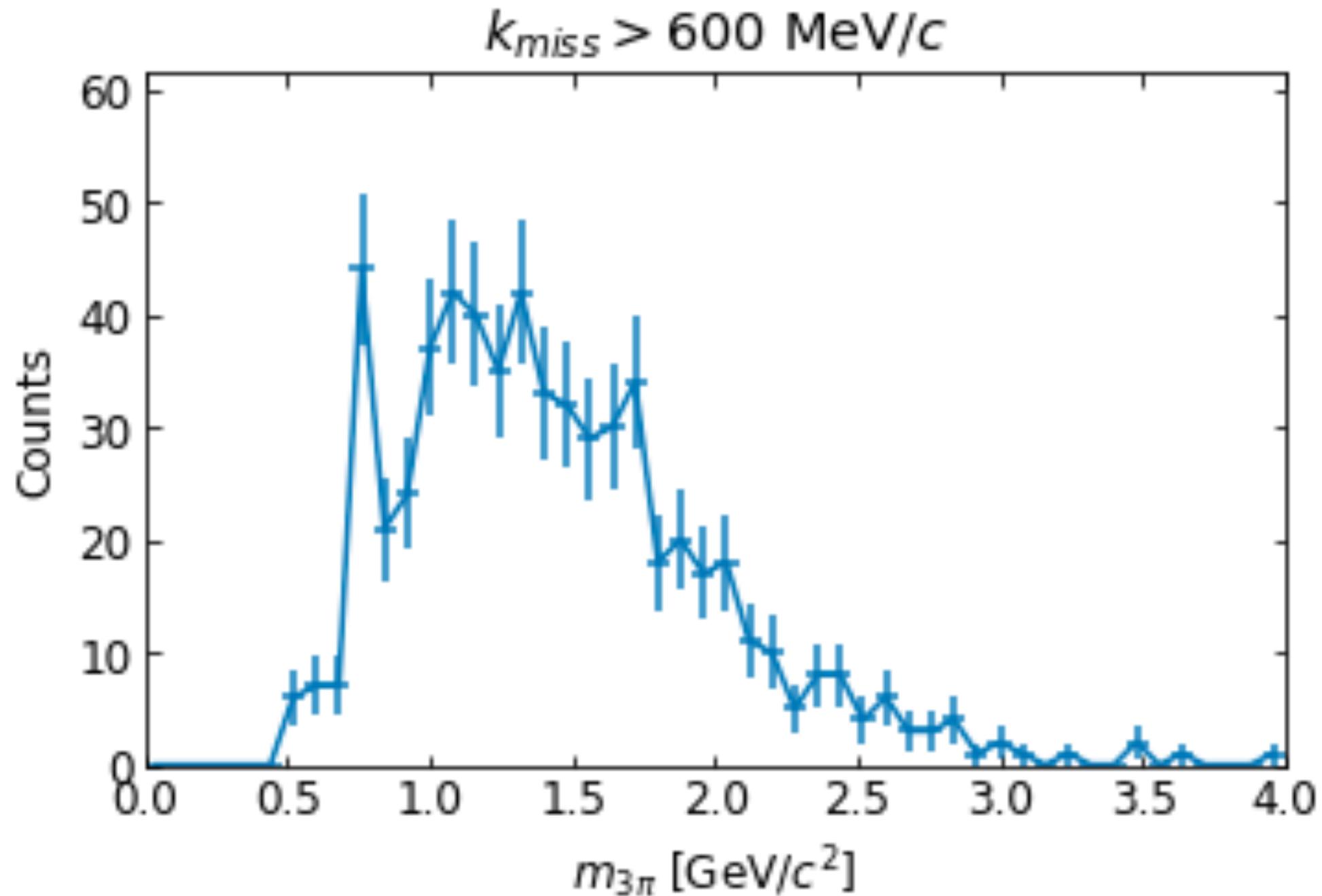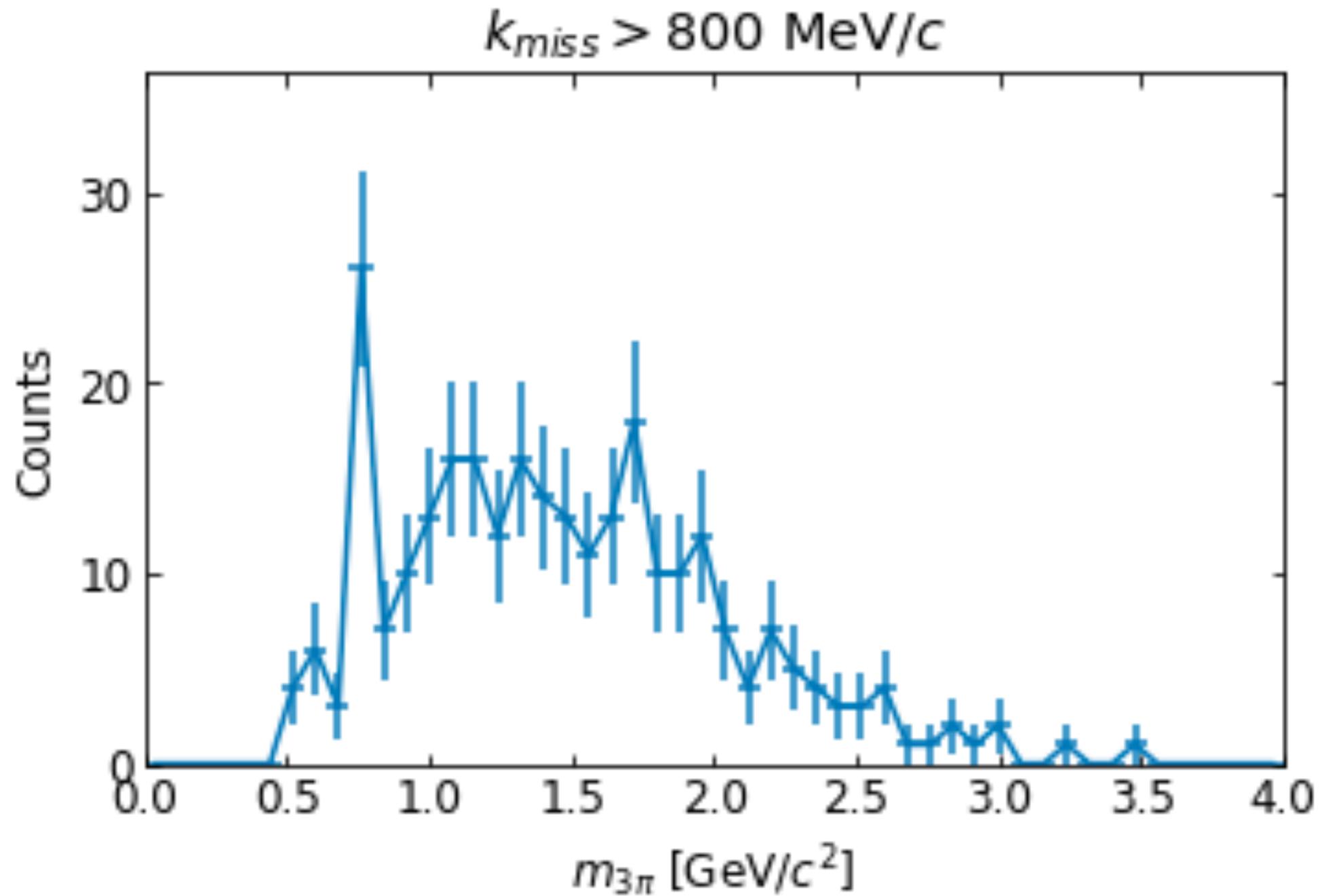
Not enough events for coincidence photon subtraction — need to add more runs