

# **Mumu Channel Update**

**Connor Waits 5-3-22**

Previous Event Selection:

Number of muons  $\geq 1$

Number of electrons = 1

$50 \text{ GeV} < \text{dijet mass} < 100 \text{ GeV}$  (VLCjetR15N2)

	N_mu $\geq 1$	N_e=1	50<dijet_mass<100	Efficiency
INT+QUAD	71.69%	16.96%	48.85%	5.94%
SM	23.75%	9.42%	21.11%	0.47%

Current Event Selections:

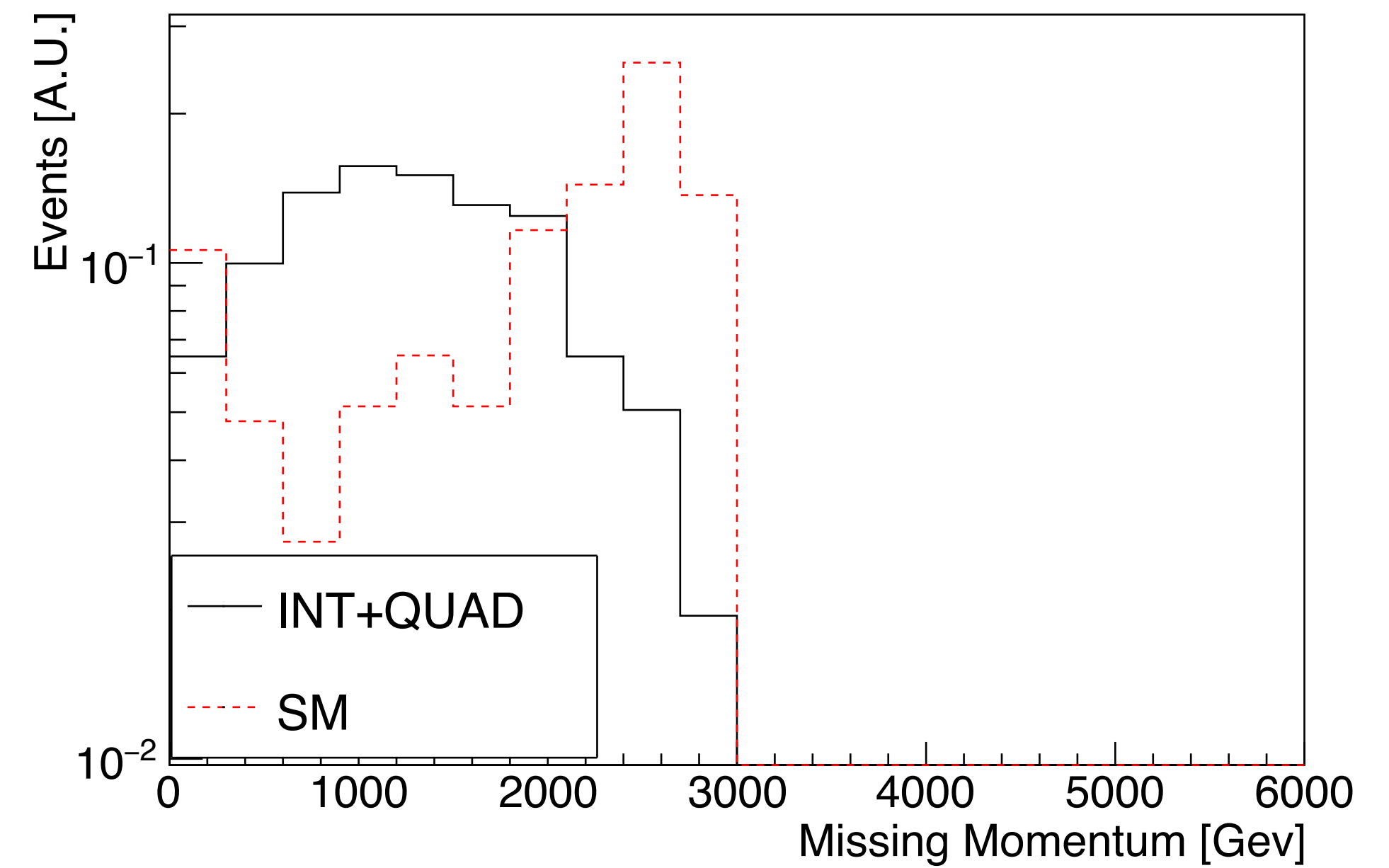
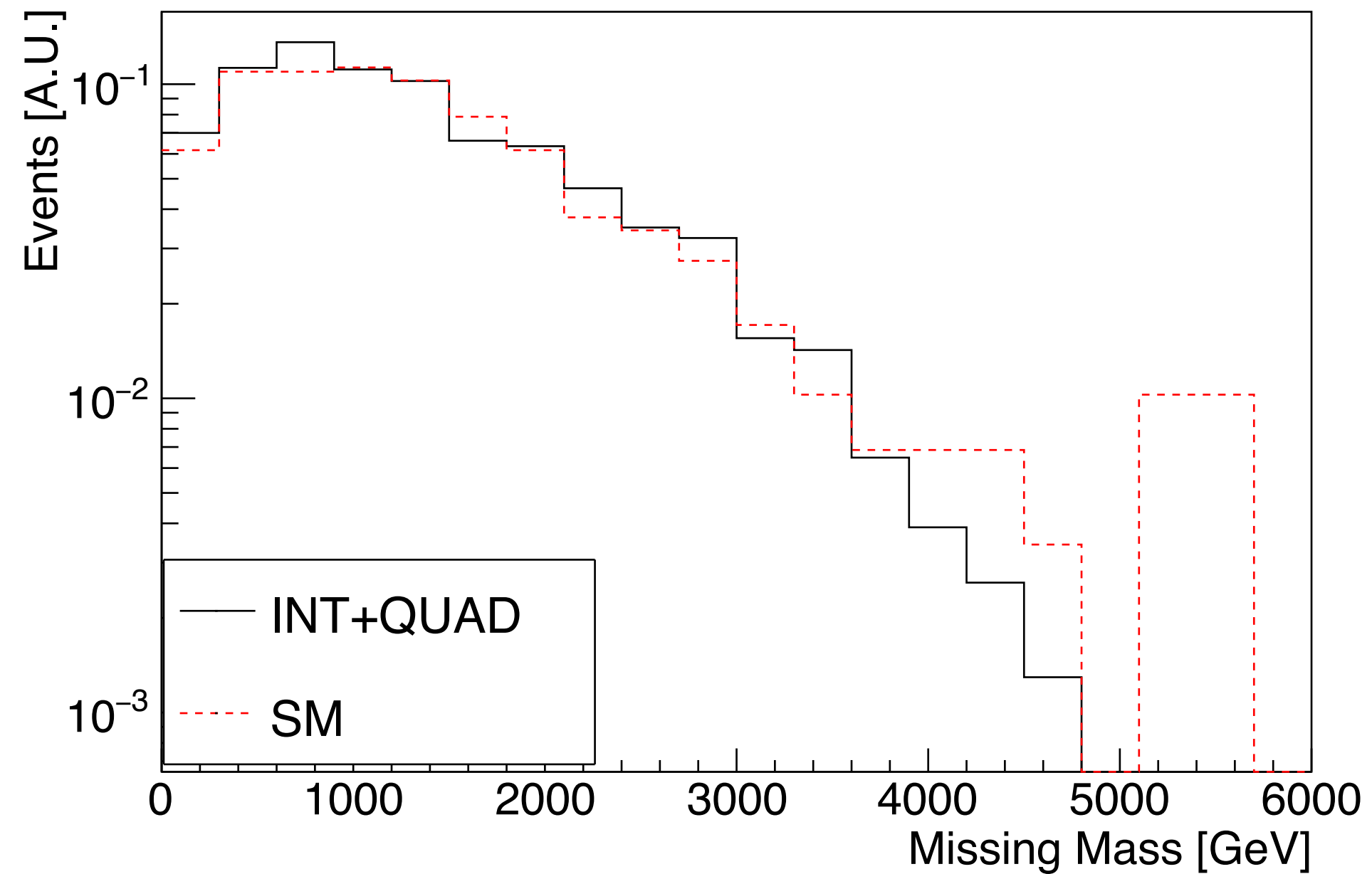
All lepton momentum  $> 15 \text{ GeV}$

Number of muons  $\geq 1$

Number of electrons = 1

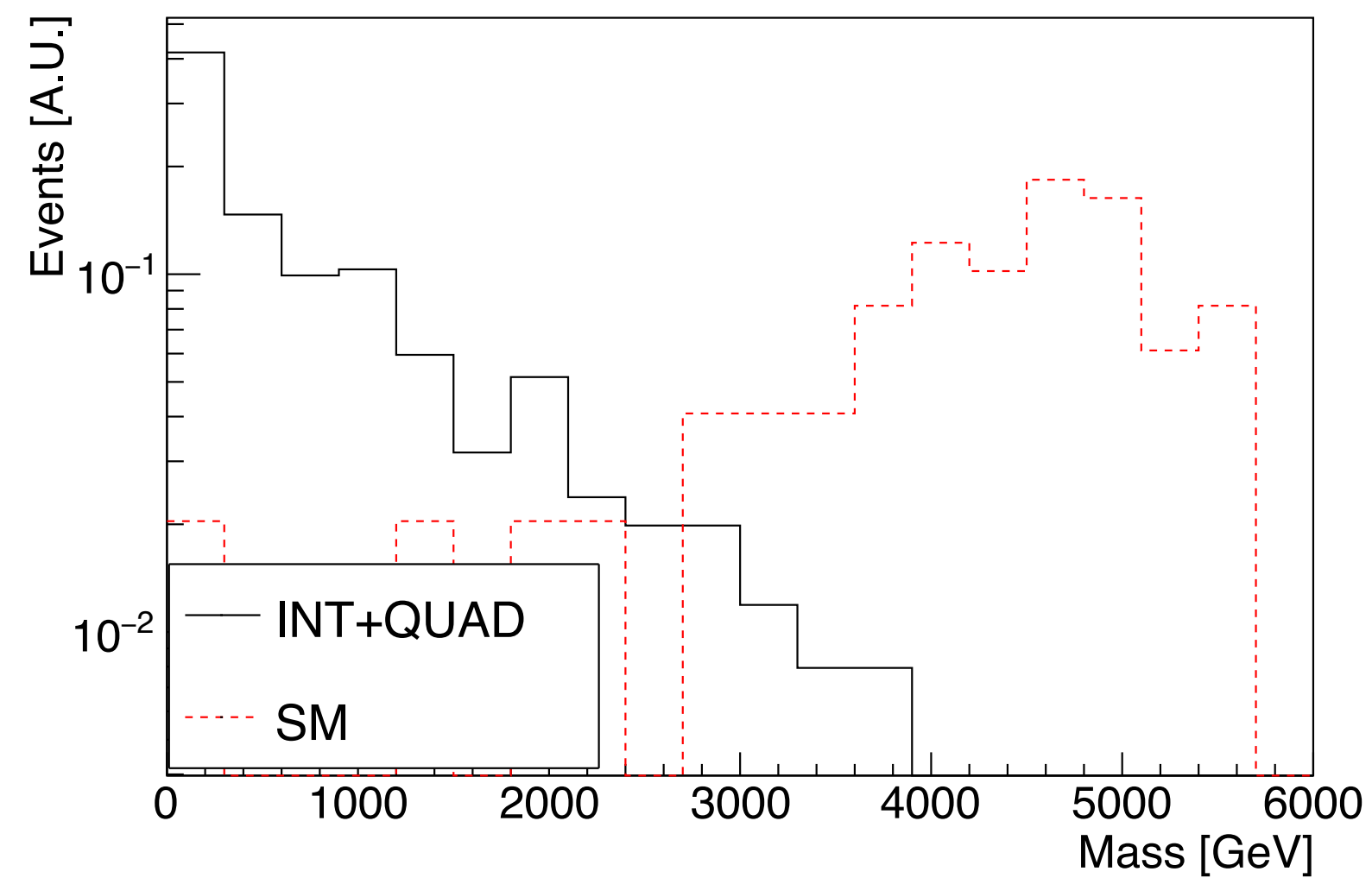
$50 \text{ GeV} < \text{leading momentum jet mass} < 100 \text{ GeV}$  (VLCR10\_inclusive)

	N_mu $\geq 1$	N_e=1	50<dijet_mass<100	Efficiency
INT+QUAD	71.23%	16.78%	64.60%	7.72%
SM	21.90%	8.85%	15.07%	0.29%

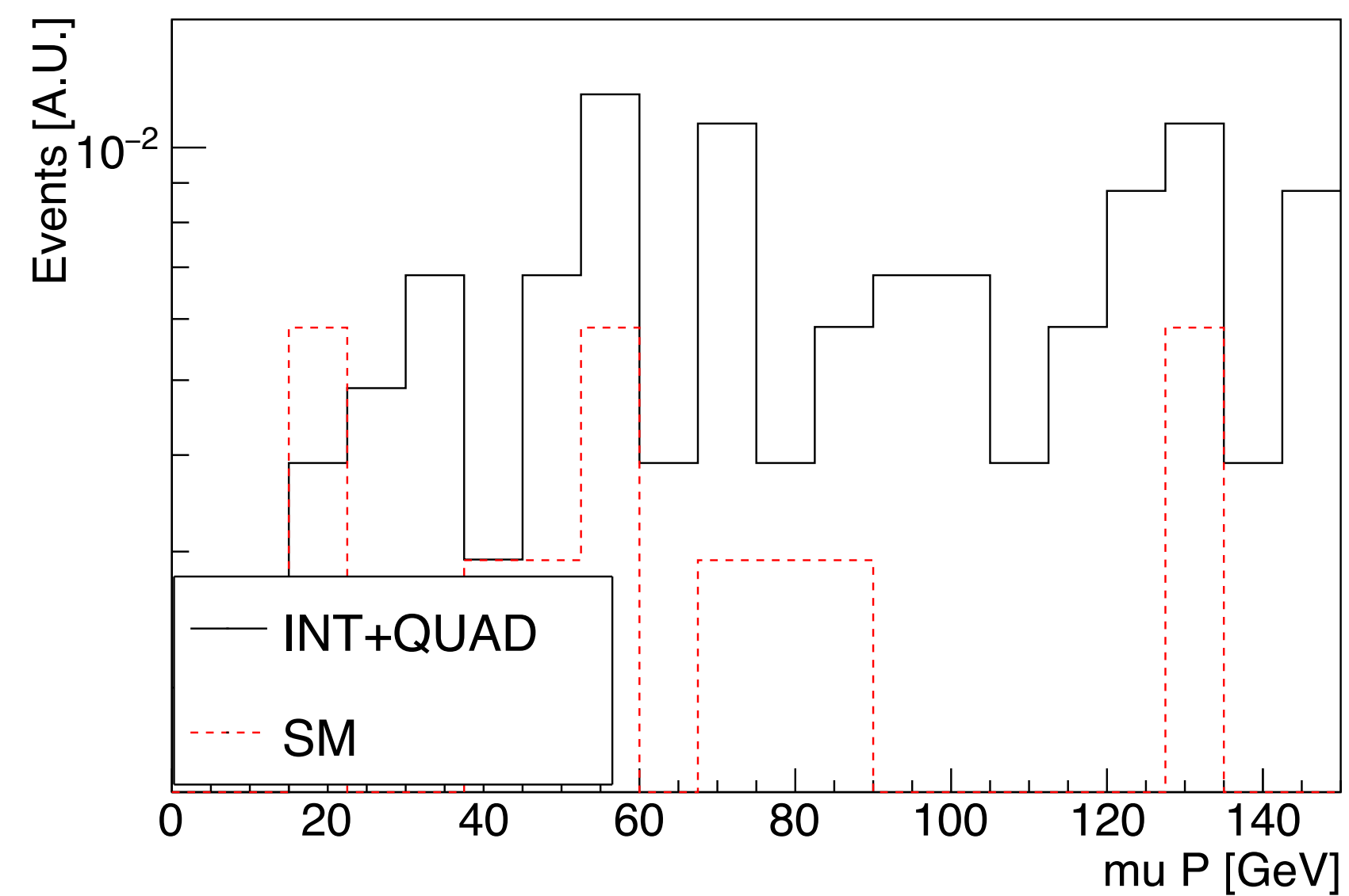
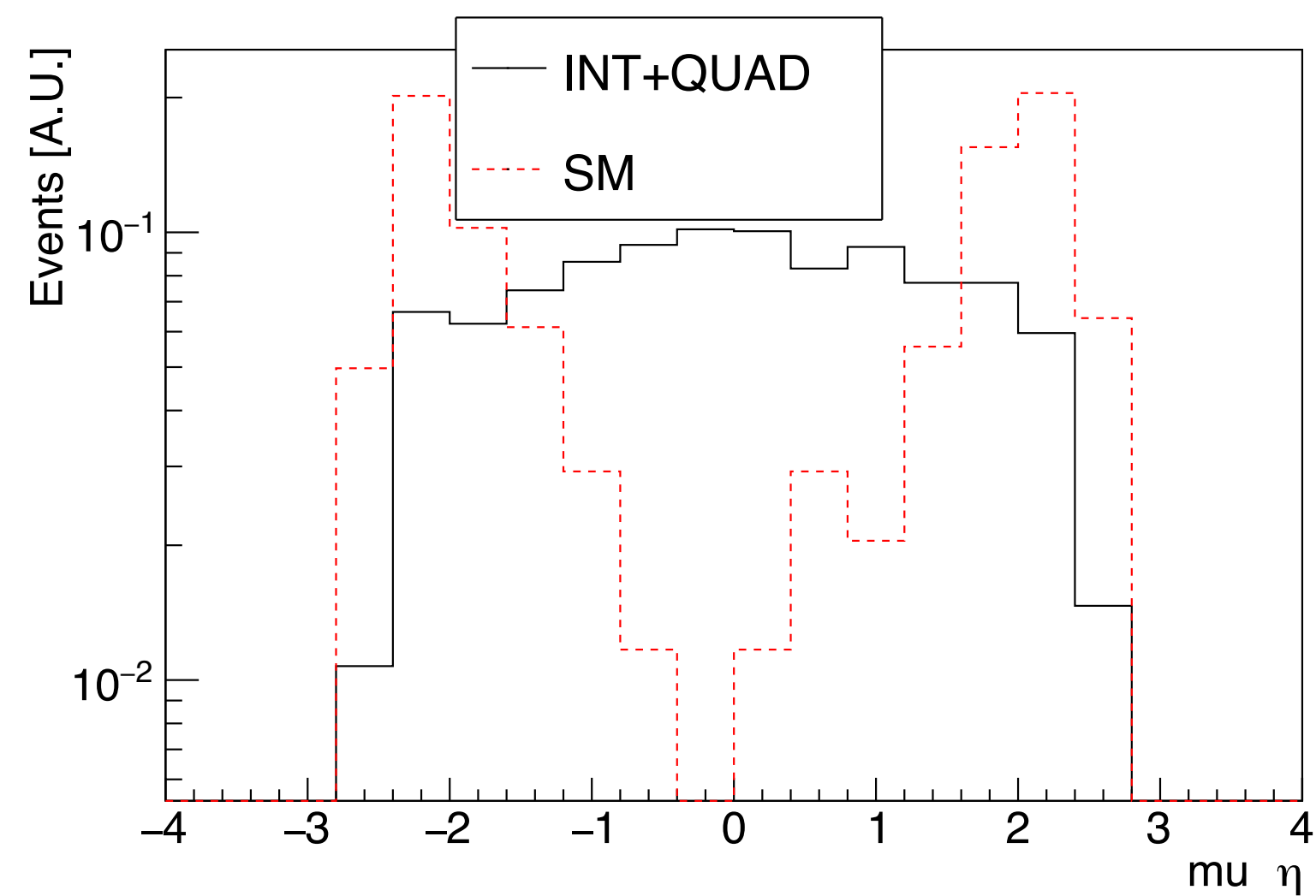
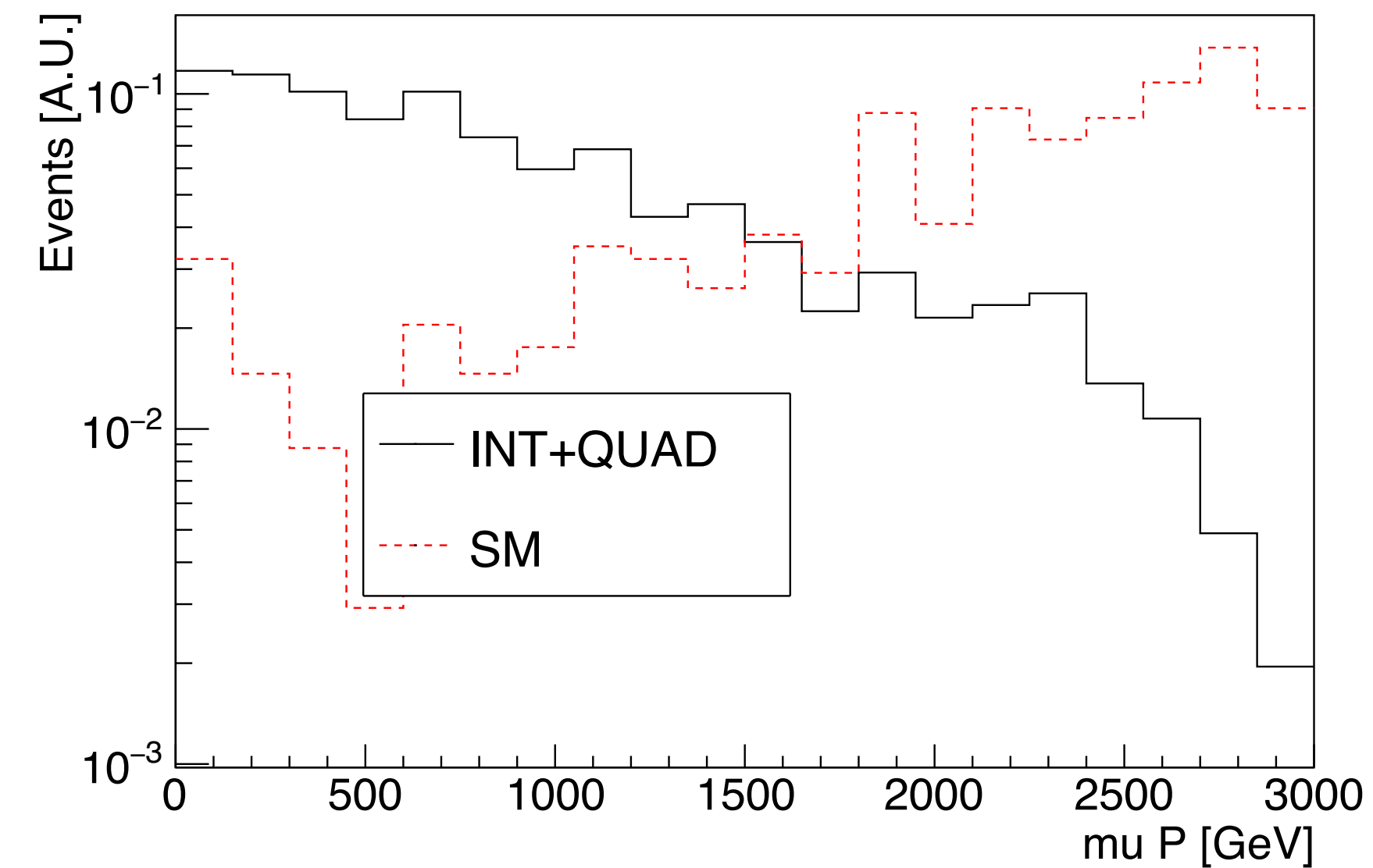
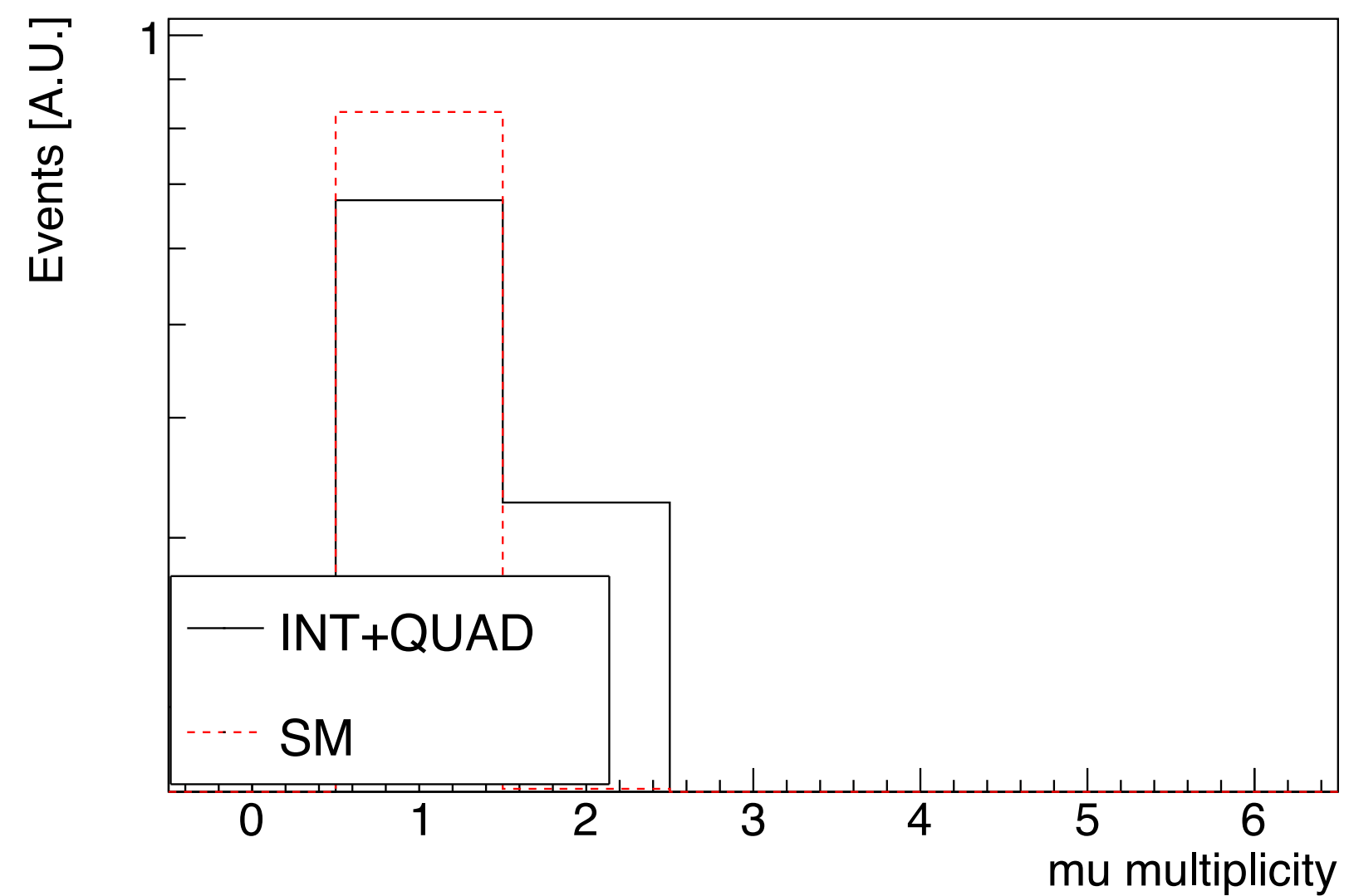


## Dimuon Mass

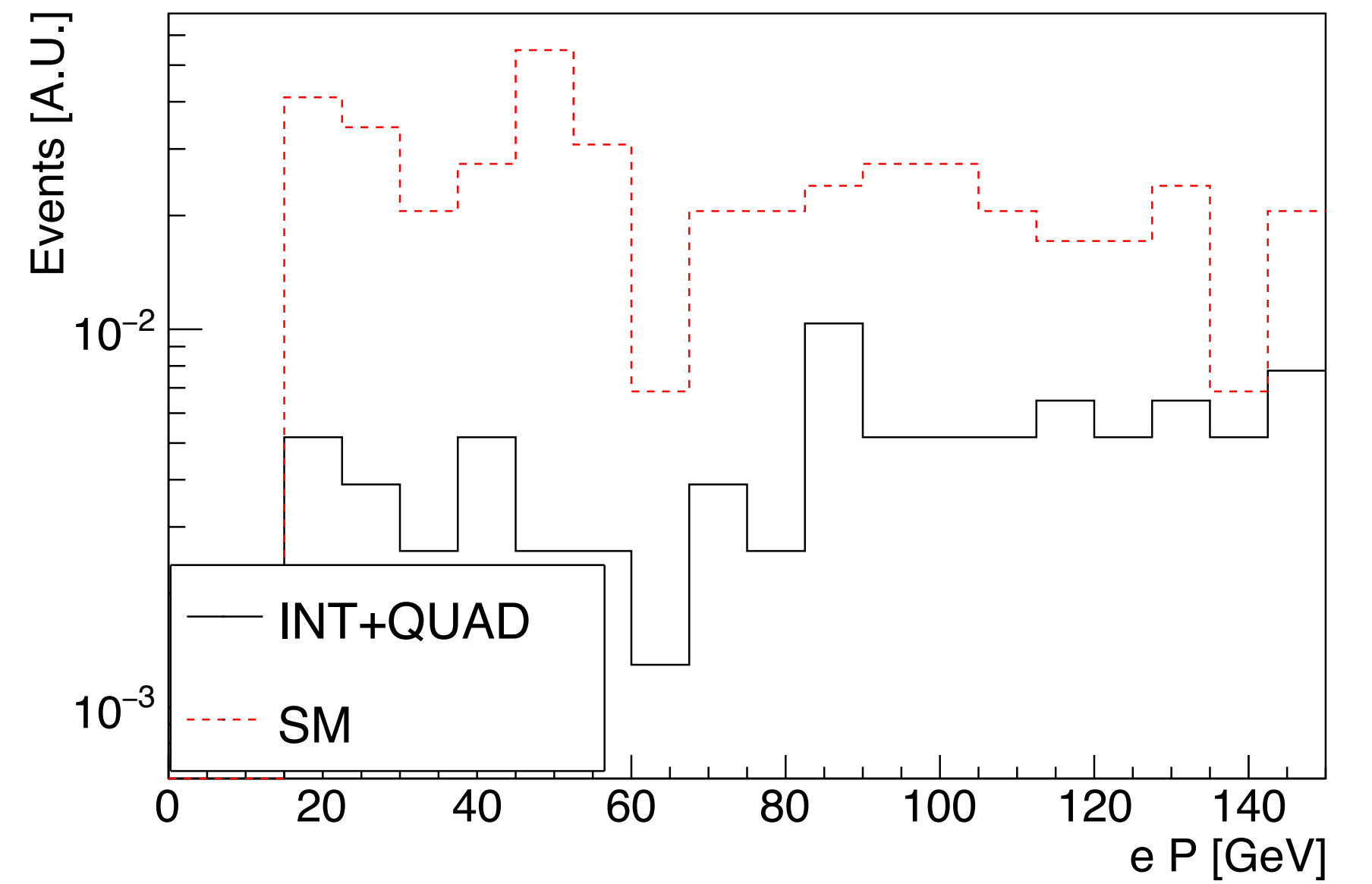
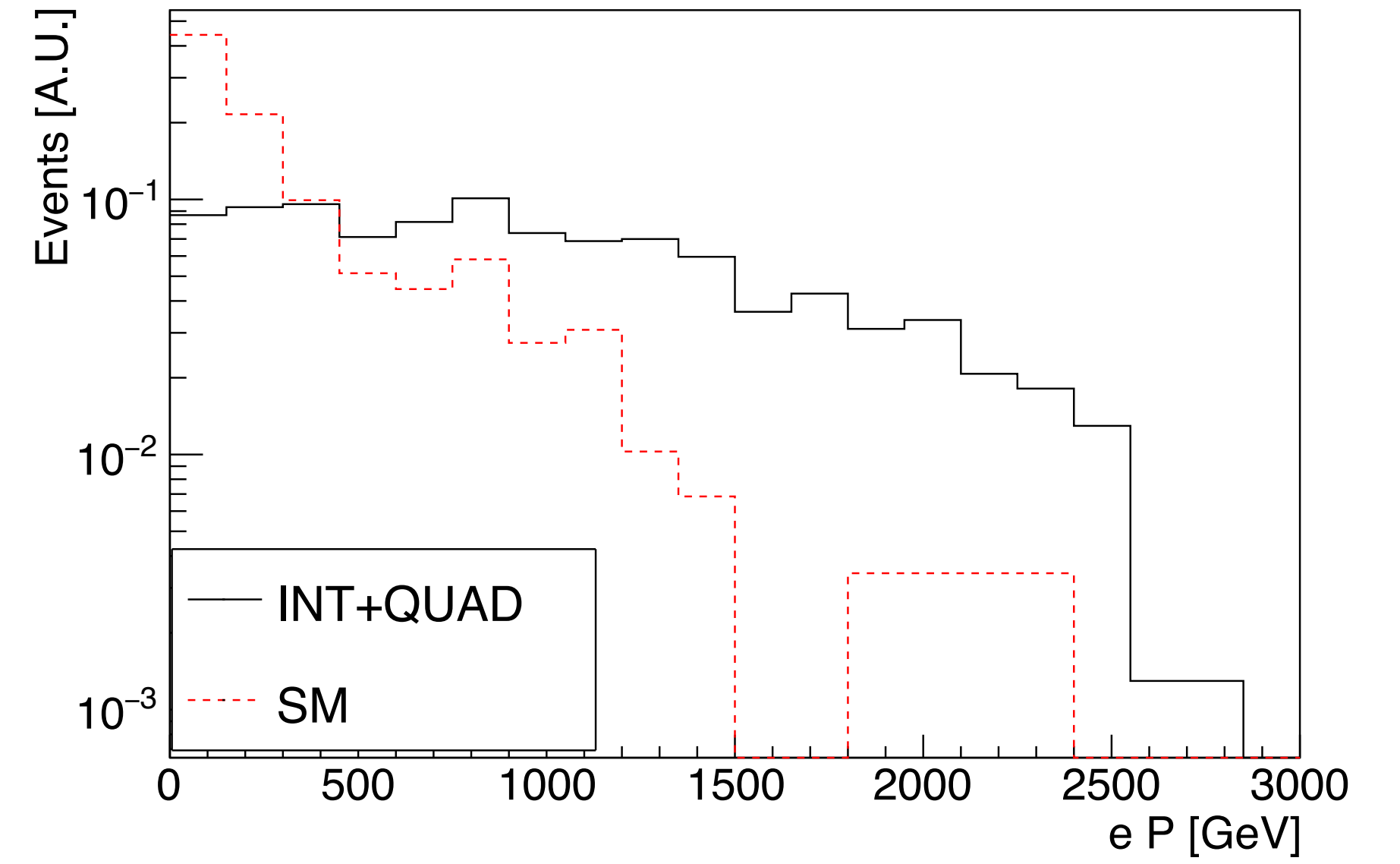
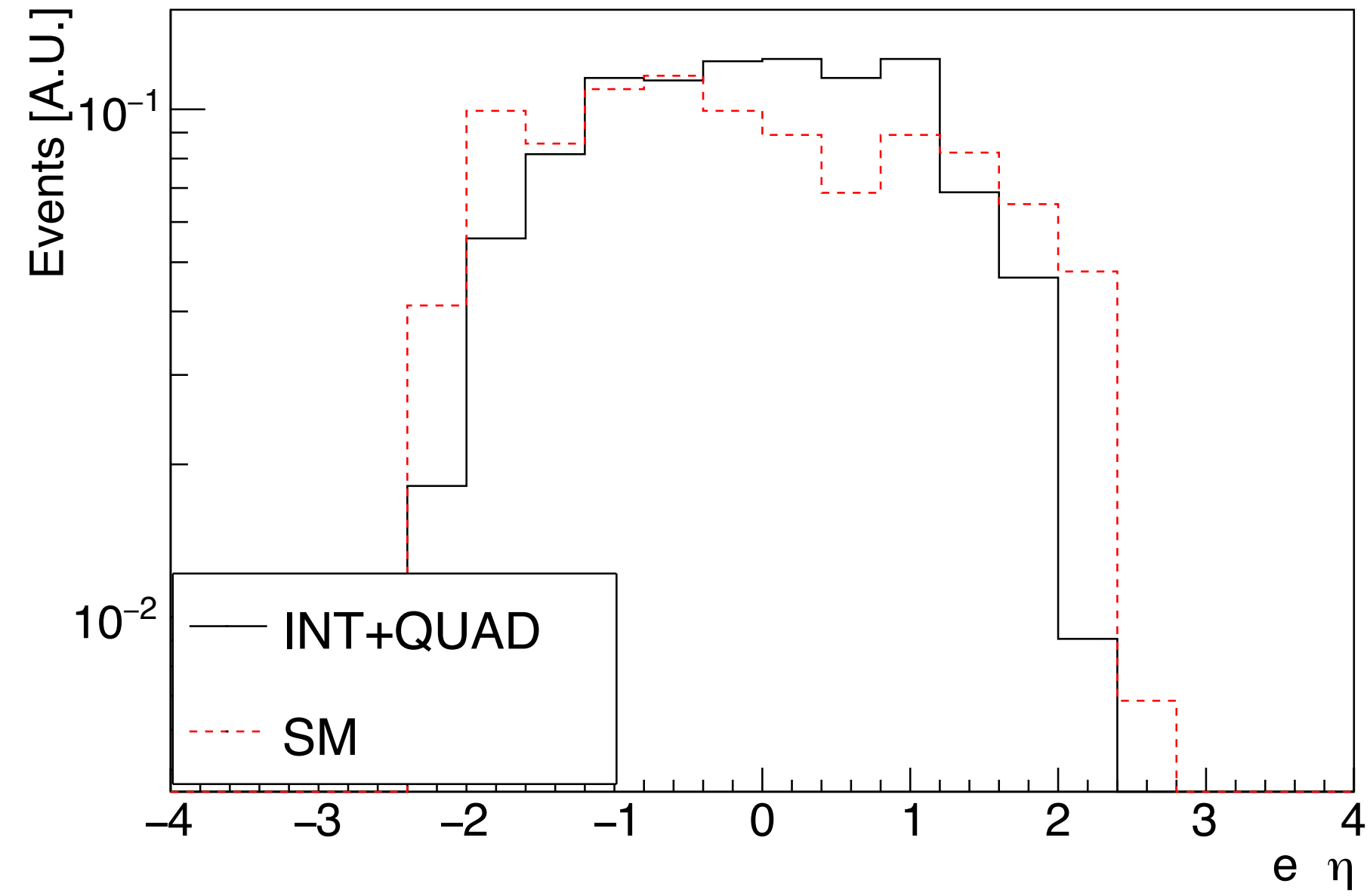
(Only for events with 2 or more muons,  
using leading & sub-leading in momentum)



## Muon plots



# Electron Plots



# Jet Plots

