

• Generated 1,000 reconstructed events (with no BIB, with 10TeV_v0A geo) through the following process:

Generated 1,000 $\mu^+\mu^- \rightarrow u\bar{u}\nu_{\mu}\bar{\nu}_{\mu}$ events with madgraph at $\sqrt{s} = 10$ +pythia8

 In process of validating these samples. • First, I noticed that event numbering was broken somewhere. Reco event numbering maxed out at 249 e.g., ..., 248, 249, 0, 1, ... so that every event number was repeated four times in my 1,000 events.



Jet Reconstruction Update



Digitized and reconstructed events using Marlin and slightly modified reco CONDOR <u>steering file</u> from Fede.

• Issue went back all the way to the .hepmc file from the pythia8 output. (Couldn't find any event numbering in LHE file?)

• To see if these truly were the same event or just a bug in the numbering, I plotted mc particle count as a function of ϕ per event. I then plotted two identically number--ed events against each other.



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Unnormalized



• Answered question about event numbering: identically labelled events are not coming from the same initial event.



Introduced questions about low MC particle number for some events.

