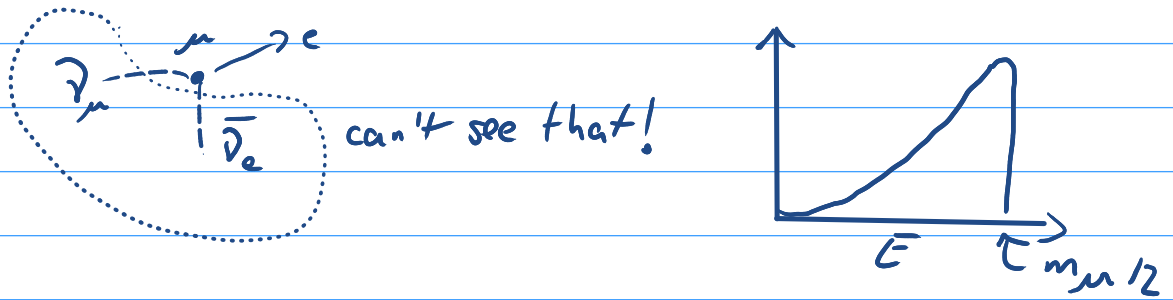


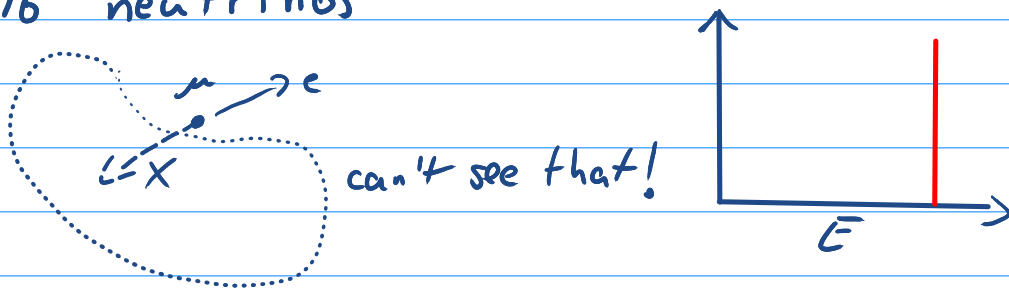
# Precise predictions for BSM searches

Muons are 200x heavier copies of the electron

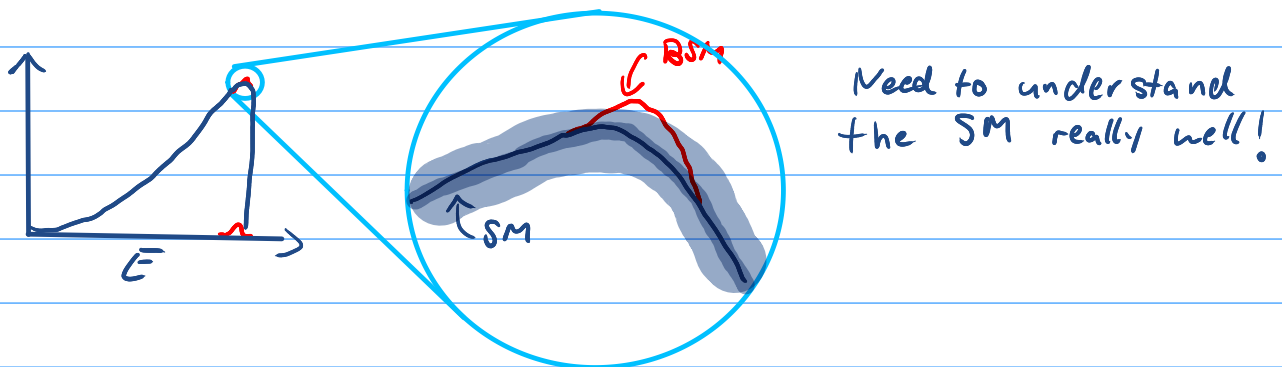
In the SM they decay almost always into an electron & two invisible neutrinos



Many theories BSM allow a rare decay w/o neutrinos



How do we know this happened when we can't see the X either?  $\leadsto$  we don't!



$\leadsto$  error is large near end point b/c the muon would like to emit many photons but can't b/c energy conservation.

