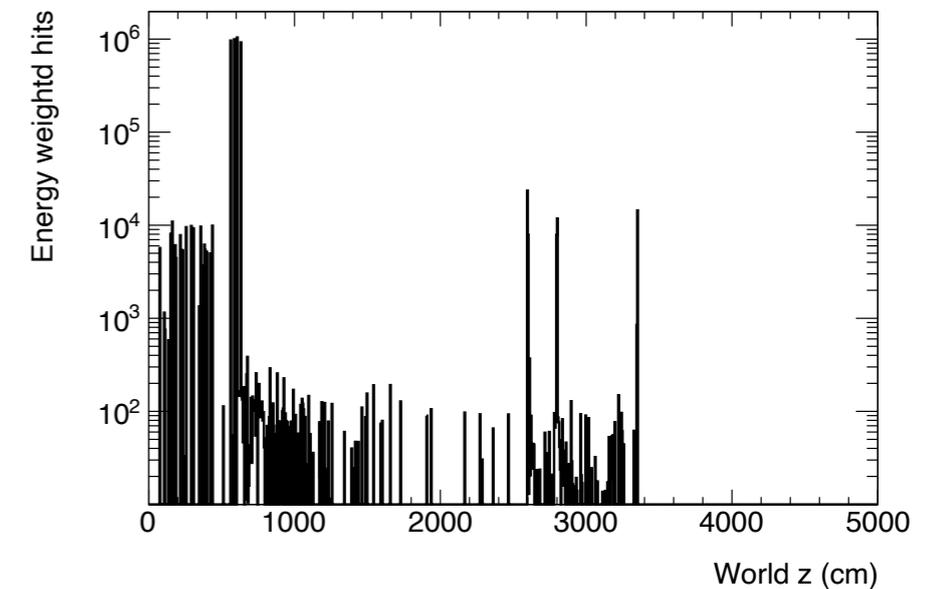


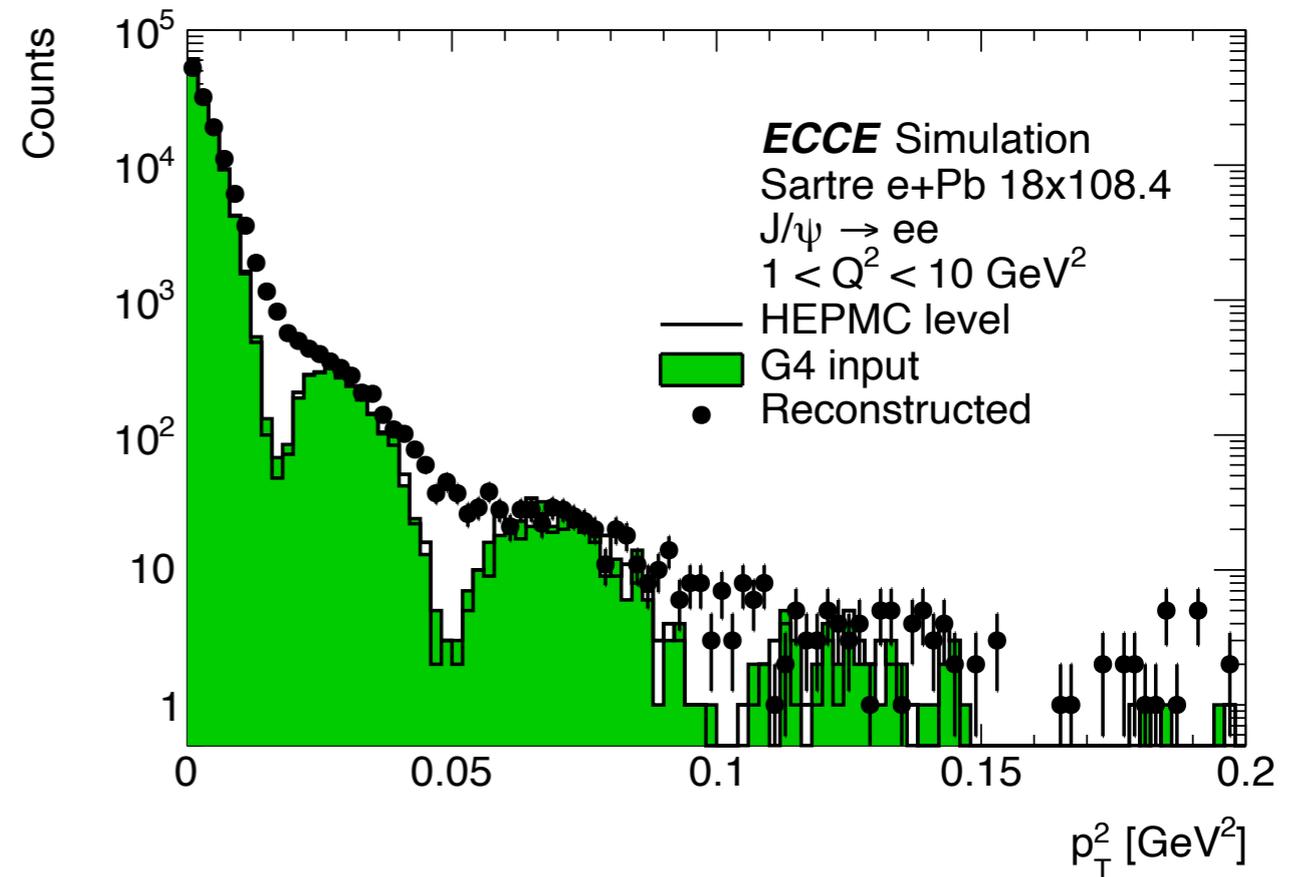
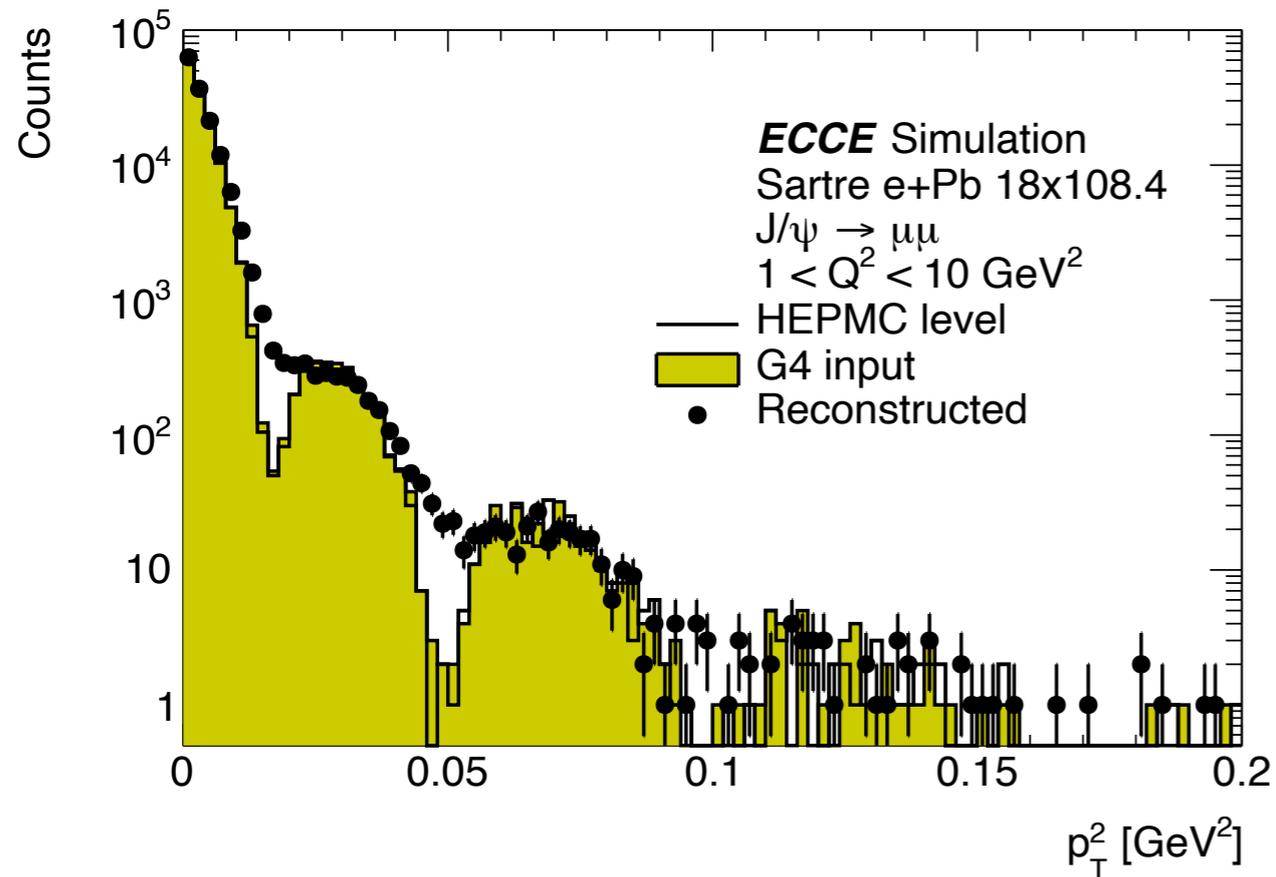
Towards an ECCE e+Pb J/ψ proposal

Summary

- **Bill has produced a fantastic set of J/ ψ samples**
 - Sartre - signal (just e+Pb for now, do we have e+Zr signal?)
 - BeAGLE - background
 - e+Pb (18x108) vs. e+Zr (18x122)
 - electron and muon decay channel
 - IP6 & IP8
- **I am now working with the “extended” EventEvaluatorEIC**
 - All hits can be written into the tuple
 - I have modified it slightly
 - *Added RP2 and OMD (not in Nicholas’ original)*
 - *Removed tracker and CALO hits (focusing on FF)*
 - *Added cut $e_{dep} > 0.1$ (MeV, right?) to remove garbage hits and reduce ntuple size*
 - Final ntuples allow cuts on number of RP and RP2 hits (but not track properties)
- **Analysis has fixed a few things since July**
 - Mainly I had an axis mixup for the boost - now fixed
 - *All results from g4 input and reco stages corrected for rotation & boost, so mean effect of x-ing angle*
 - HEPMC & G4 input agree very well, despite beam effects (included by default), which I now consider to be subdominant
 - 10 sigma cuts applied to all RP and RP2 as ellipses
 - *RP2 y cut is so small that I rounded it up to 2mm (cf 6-7mm in RP)*
- **Barrier to “final” plots is now the extra activity from the B0**



Signal plots



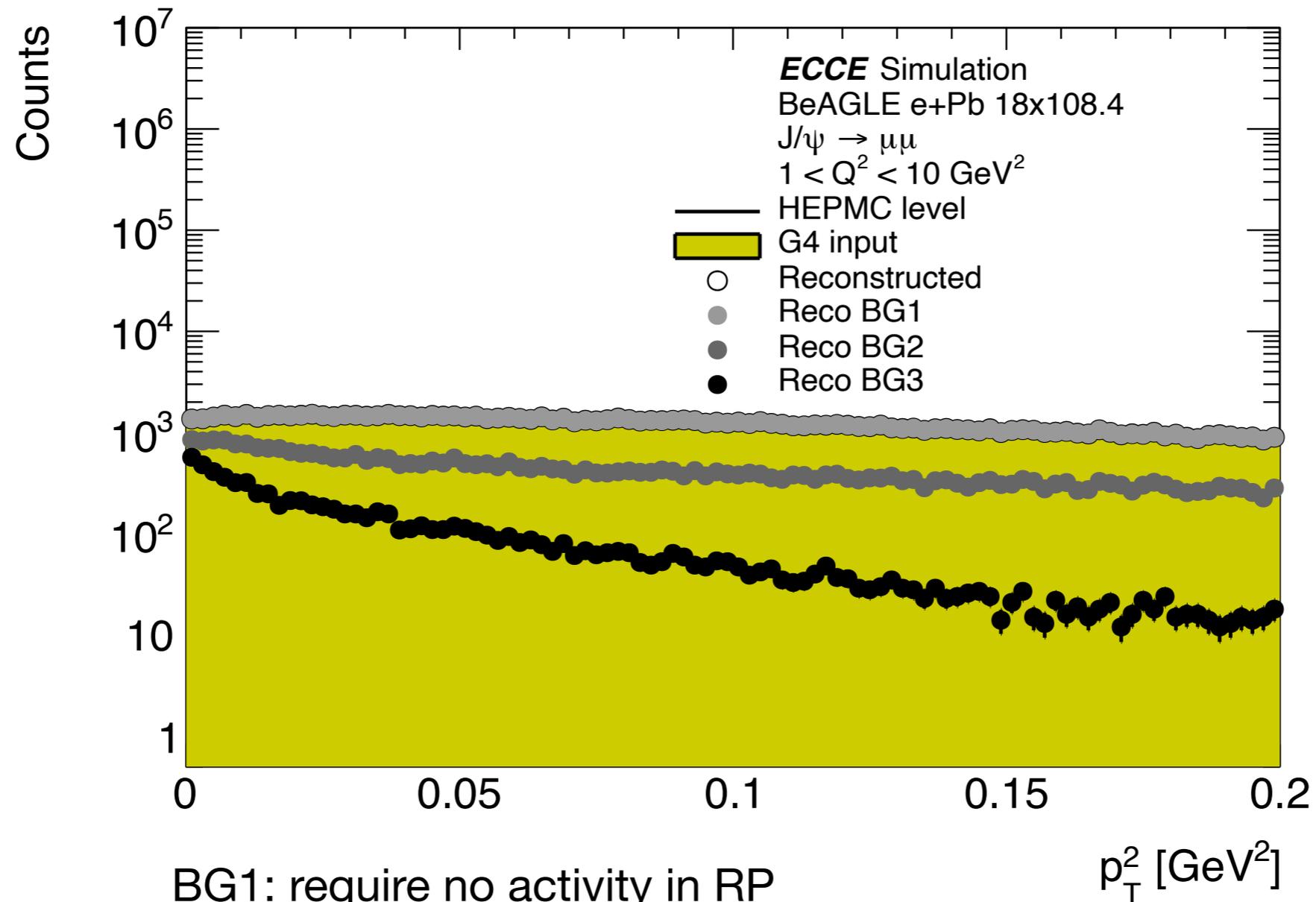
Nice to see:

- electron channel isn't so bad
- perfect agreement of g4input and HEPMC

Need to see:

- Correct normalization
- higher stats?

Background startup



BG1: require no activity in RP

BG2: require no activity in RP+RP2

BG3: require no activity in RP+RP2+ZDC

Needs fixed B0 material

Also needs proper normalization