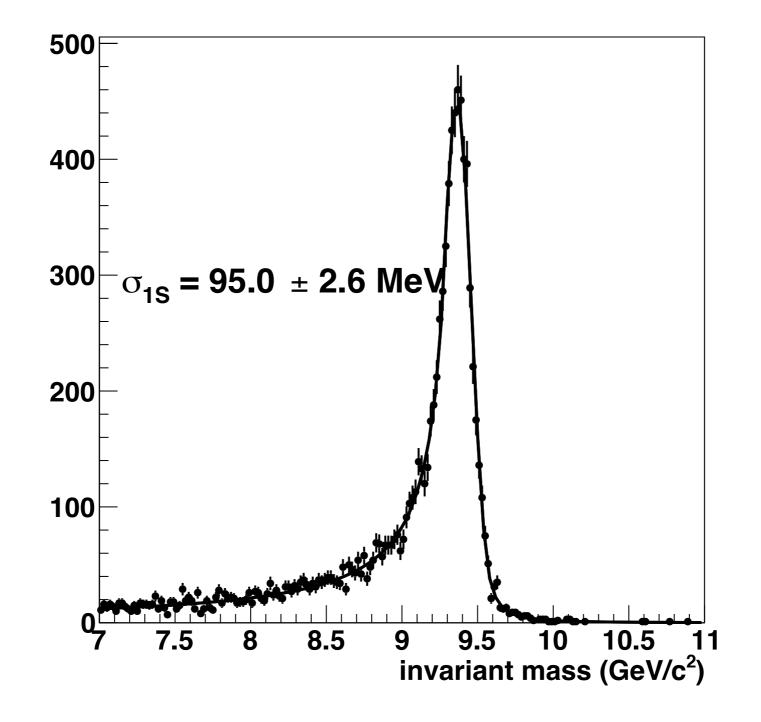
Investigate momentum resolution loss

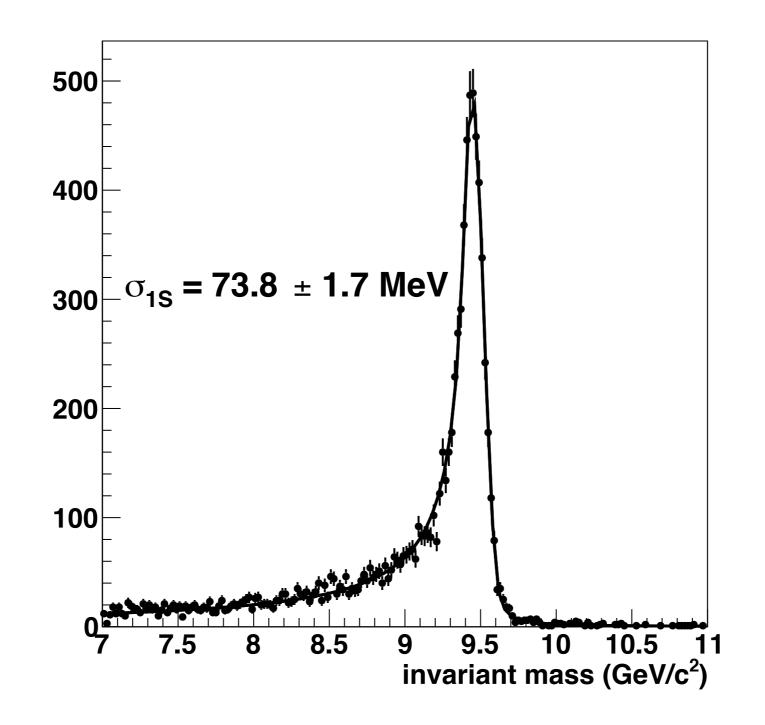
Tony Frawley FSU May17, 2021 Full Acts tracking chain, 100pions + Y(1S)

This used to be ~ 85 MeV.



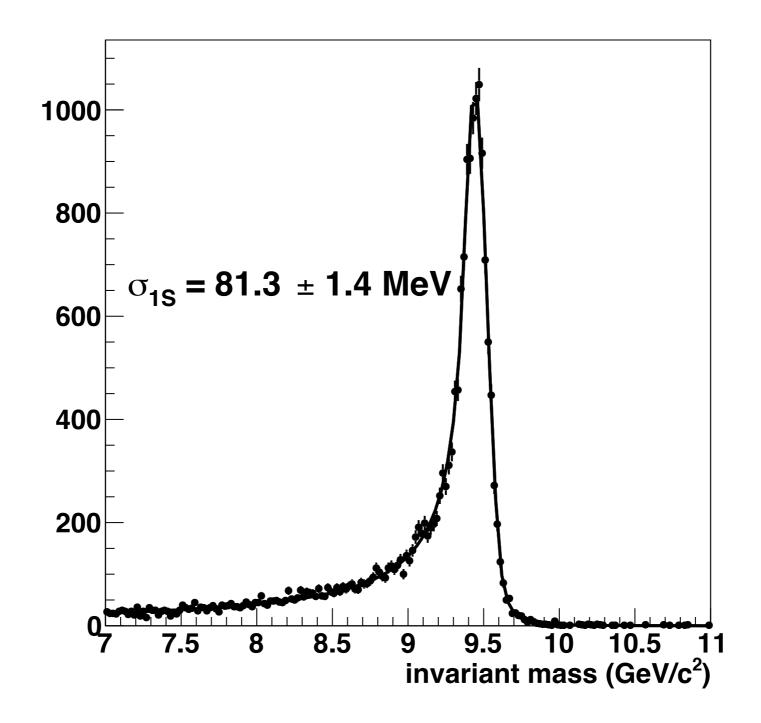
Full Genfit chain, 100pions + Y(1S)

Genfit was typically 75 MeV. This vindicates the G4 detector model & the hit reco & clustering.



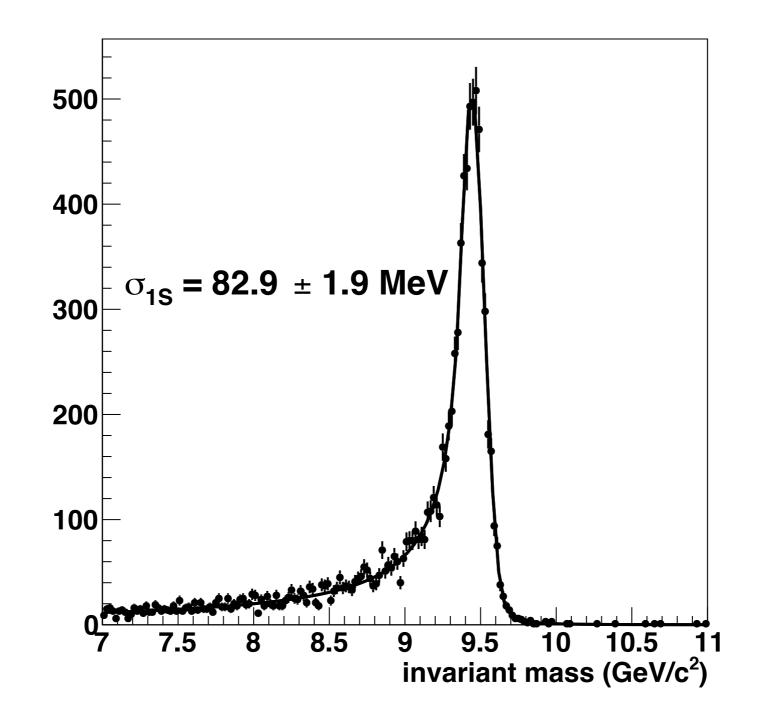
Acts seeding chain + Genfit final fit, 100pions + Y(1S)

Genfit final track refit after Acts seeding chain - somewhat worse than with Genfit track prop.



Acts seeding chain + Acts fit + Genfit final fit, 100pions + Y(1S)

Genfit final track refit after full Acts chain improves mass resolution by 12 MeV.



Acts seeding chain + Acts fit + Genfit final fit, 100pions + Y(1S) Add bad cluster rejection in PHTpcTrackSeedVertexAssociation

Reject clusters that miss helical fit by 800 microns in xy plane, no cut in Z - has no effect.

