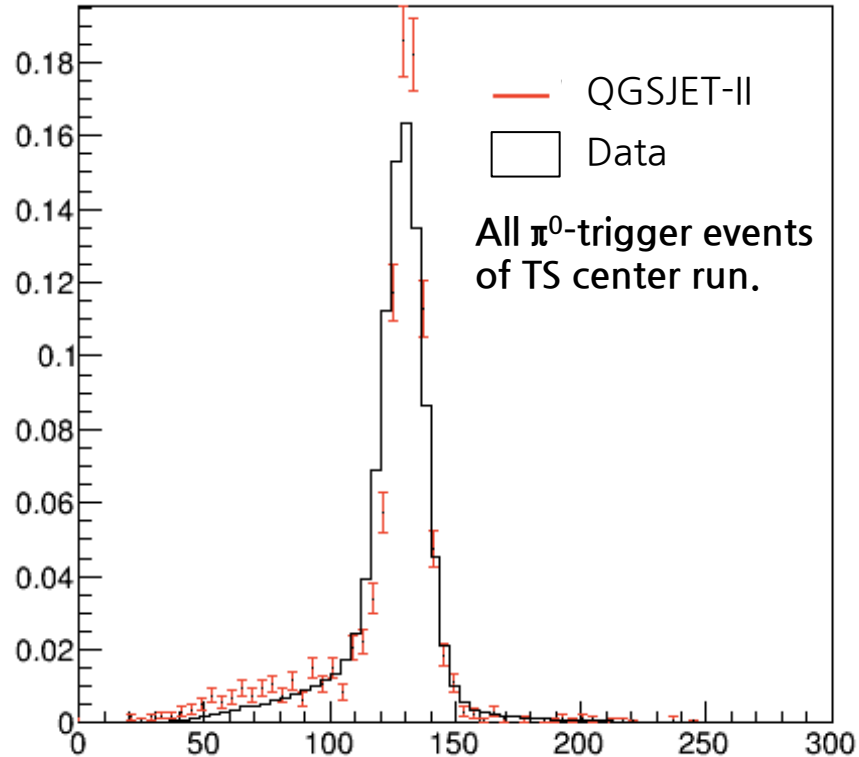


Background estimation

9 May. 2019
Minho Kim

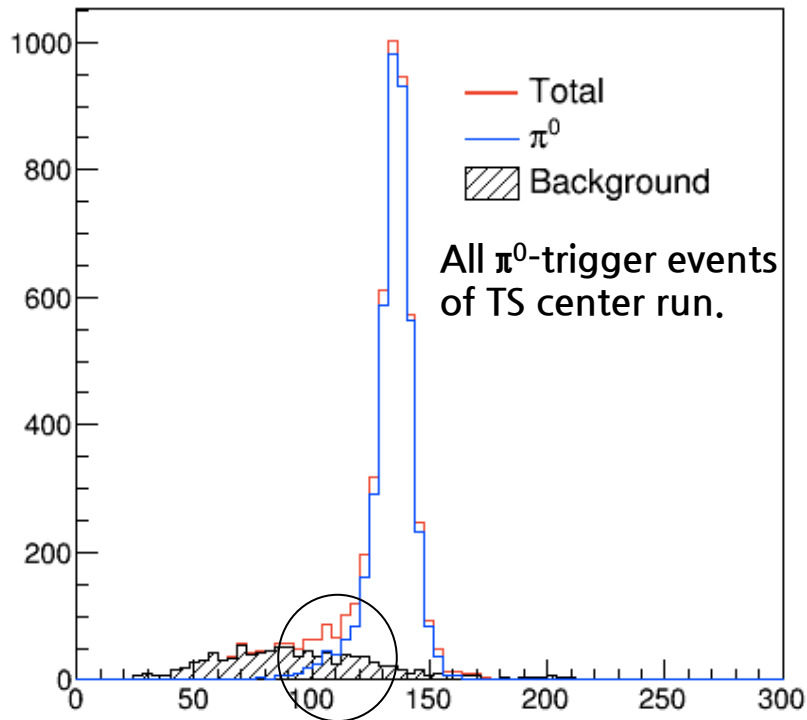
Background of data vs simulation



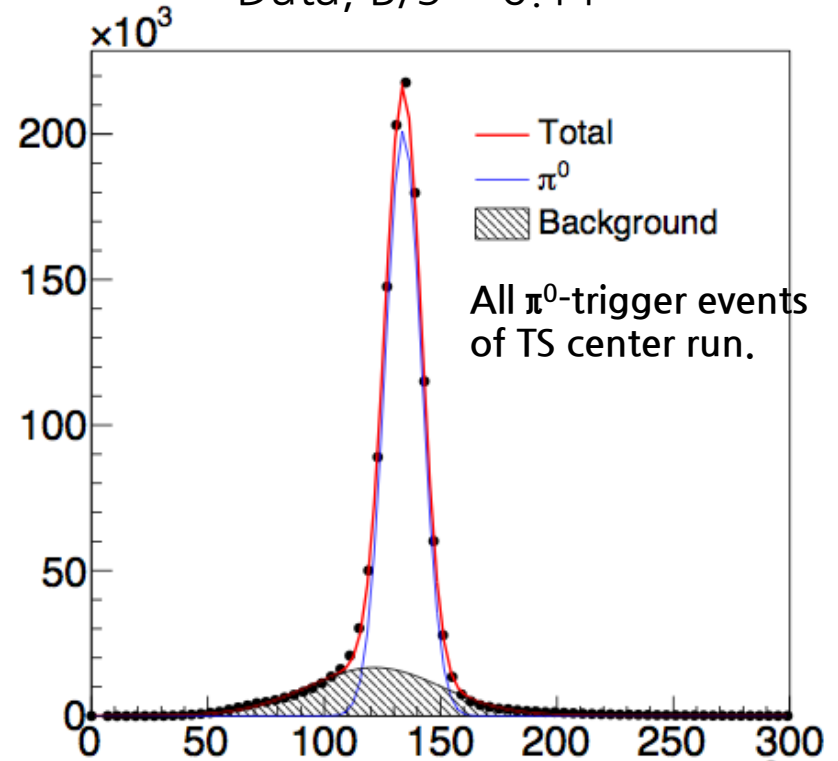
- Simulation is underestimating the magnitude of invariant mass from background two photon, which mostly comes from two different π^0 .
- Peak width of data is wider than simulation.
- Trying to find the origin of these two discrepancies.

B/S ratio of data vs simulation

Simulation, B/S = 0.04



Data, B/S = 0.11



- Data fitting is \sim factor 3 overestimating B/S ratio because of the π^0 tail.
- Until now B/S fluctuation from 0 to B/S by fitting was applied to background A_N subtraction systematic but after correcting the problem of page 2, difference of B/S between MC and data will be applied to background systematic.

Paper writing

