

Measurement of Prompt and Non-prompt J/ψ in Pb-Pb Collisions at $\sqrt{s_{NN}} = 5.02$ TeV in Central Barrel

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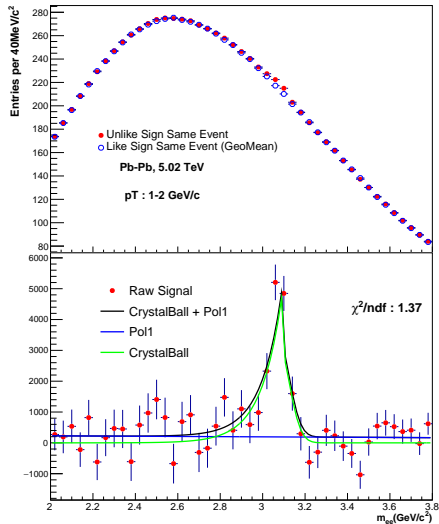
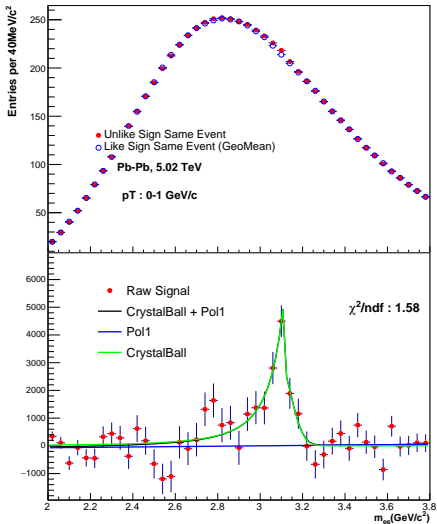
ALICE

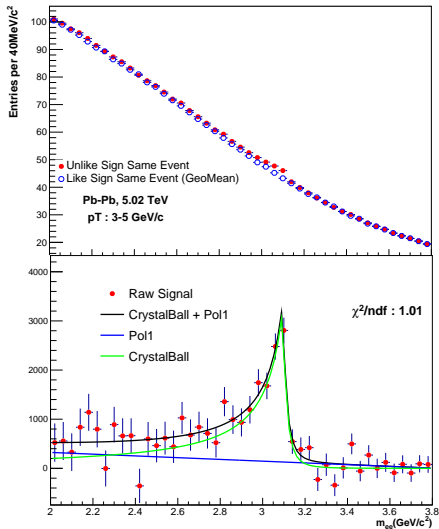
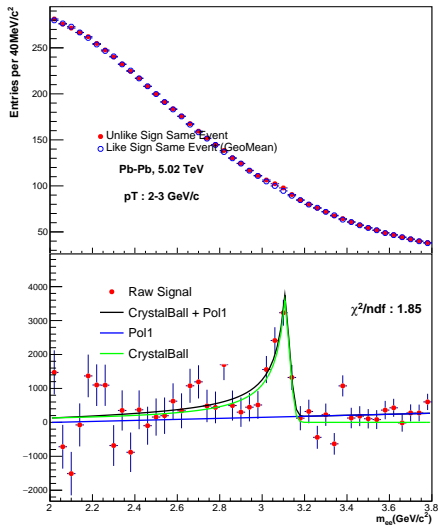
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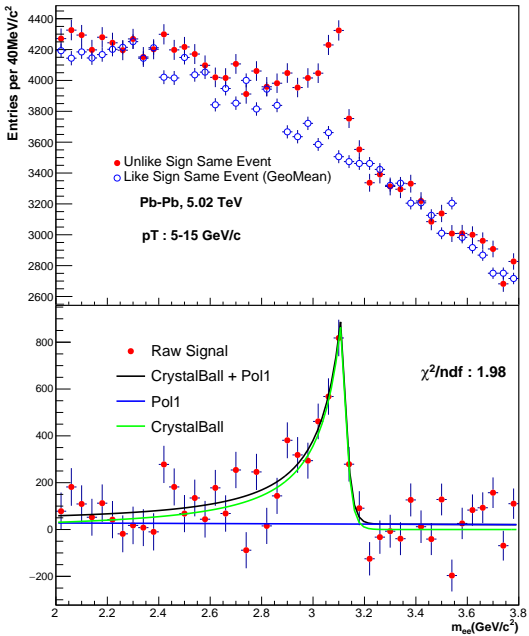
Done this week:

- Total Runs analysed in period LHC18r = 83
- Trees from these runs copied locally and analysed *parallelly* (using 32 cores on the workstation)
- Time cost : 2.5 hrs (Faster!)
- J/ψ - Signal Extraction for LHC18q+r : Extended CB function (CB2) is used (**Standard in ALICE**) and Pol1 is used for background description (to start with).

Signal in different p_T slices
Centrality 0-10%







Signal integral in region (2.92 -3.16)

pT-range	jpsi integral (2.92,3.16)
0-1	542.05
1-2	537.641
2-3	370.811
0-3	1304.74
3-5	381.032
5-15	97.4082

Further Improvements and plans

- Extracted Yields are 10 times less than obvious. **Should be improved!**
- Fits can be improved → Mixed Event can be used for the bkg subtraction.
- Cut studies on Pseudo-proper decay length from L_{xy}