Last upgrade on constraints for Z couplings

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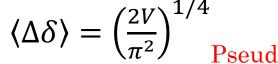
Introduction of characteristic parameter

4-Elipsoid Volume:

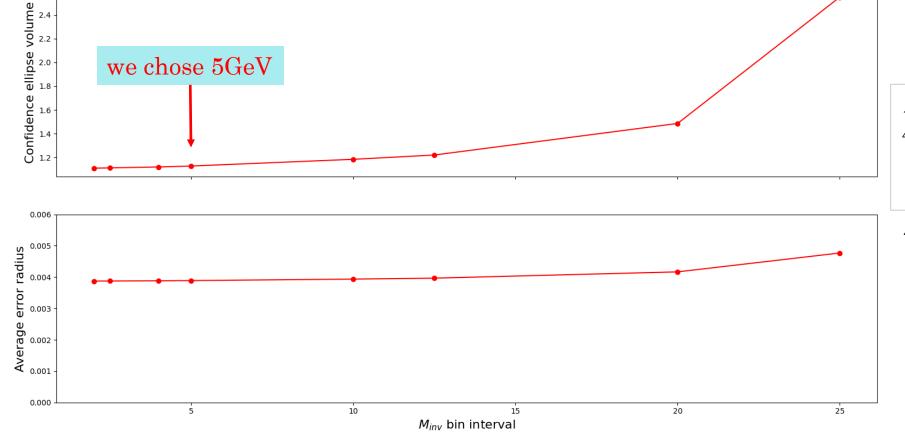
$$V = \frac{\pi^2}{2} \Delta \delta_{Lu} \Delta \delta_{Ru} \Delta \delta_{Ld} \Delta \delta_{Rd}$$

$$\langle \Delta \delta \rangle = \left(\frac{2V}{\pi^2}\right)^{1/4}$$
Pseudodata for decomposition

Average volume error:



Pseudodata for different binning

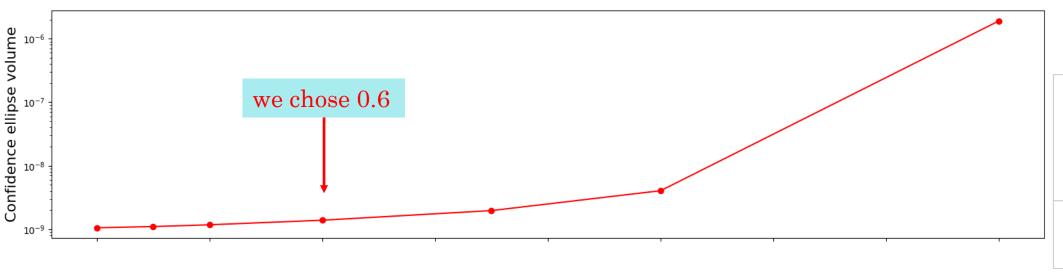


 M_{inv} range: 45-145 GeV Rapidity: 0-3.6

4 rapidity bins

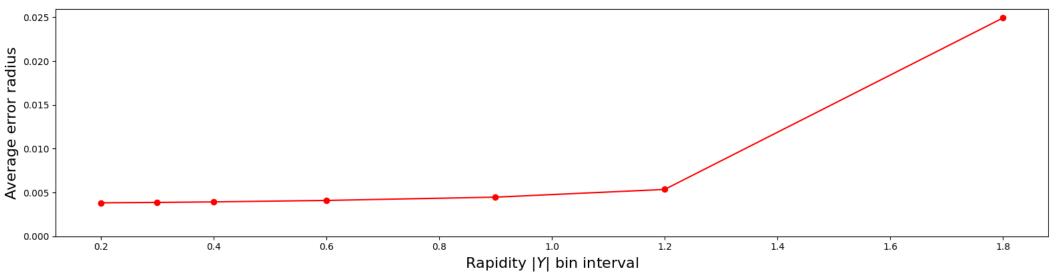
Binning with respect to rapidity |Y|

Pseudodata for different binning



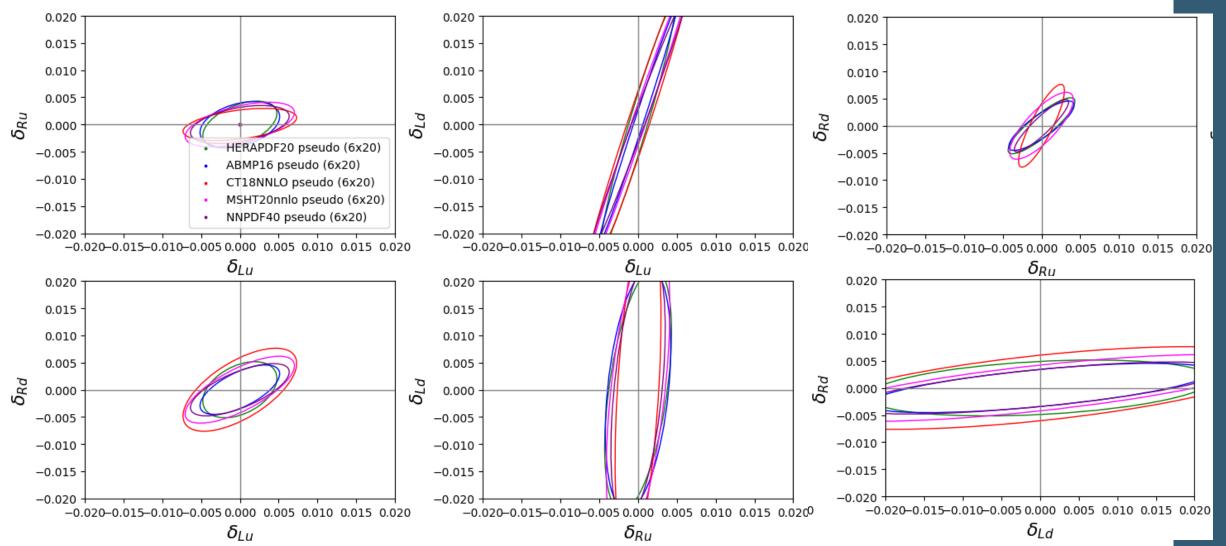
 M_{inv} range: 70-125 GeV Rapidity: 0-3.6

 $11 \, M_{inv}$ bins

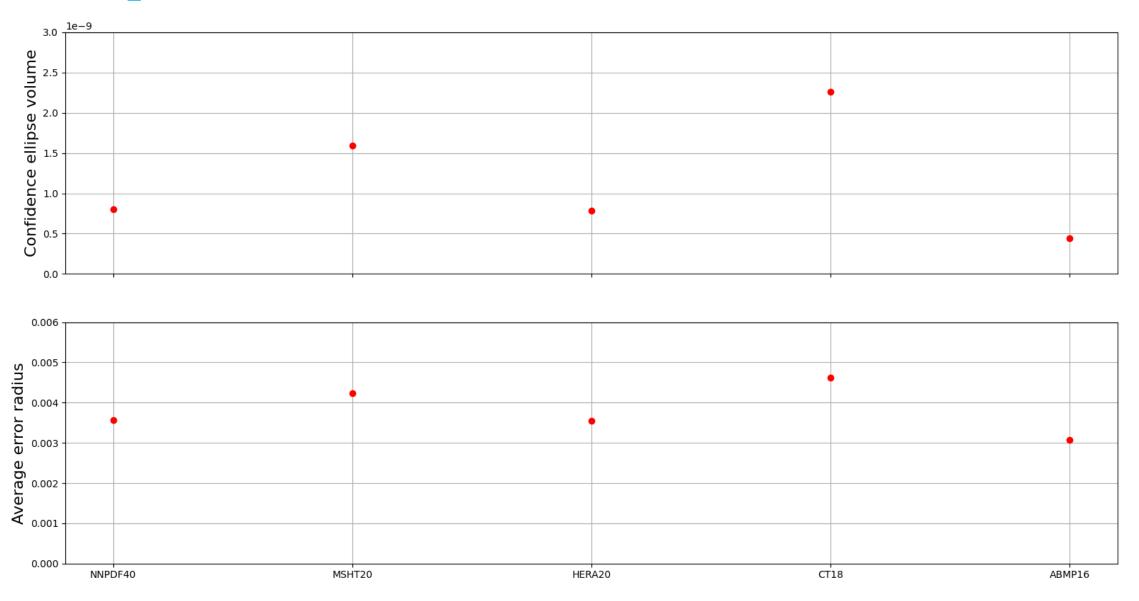


Comparison of different PDFs

 M_{inv} range: 45-145 GeV Rapidity: 0-3.6



Comparison of different PDFs with Volumes



Recent Results

- Dependence of errors from width of rapidity |Y| and M_{inv} bins was explored
- Dependence of errors from different PDF sets also was studied
- Next step: preparing to publication