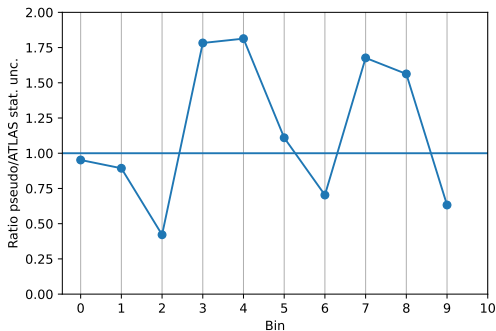


Check of pseudodata statistical uncertainties vs ATLAS-CONF-2018-037

bin M - GeV	70-80	70-80	70-80	80-100	80-100	80-100	80-100	100-125	100-125	100-125
bin $ \gamma $	0-0.8	0.8-1.6	1.6-2.5	0-0.8	0.8-1.6	1.6-2.5	2.5-3.6	0-0.8	0.8-1.6	1.6-2.5
ATLAS stat. unc.	0.0149	0.0160	0.0324	0.0013	0.0013	0.0021	0.0037	0.0073	0.0079	0.0188
pseudo stat. unc.	0.0142	0.0143	0.0137	0.0023	0.0024	0.0023	0.0026	0.0122	0.0123	0.0119



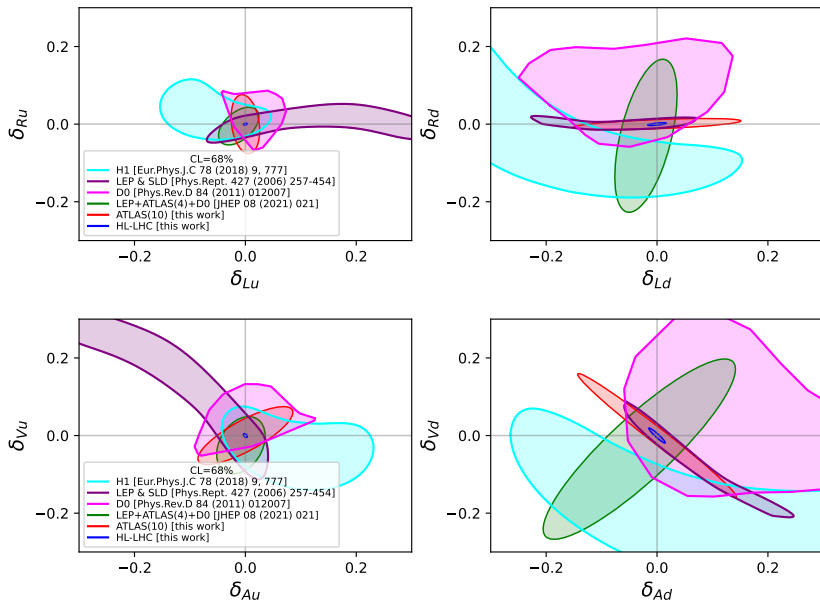
- pseudo: assume 20% efficiency, LO calculations, no PDF unc. etc.
- no cuts on lepton γ , p_T : smaller pseudo unc. in bins with max. $|\gamma|$ (bins 2,6,9)
- systematic unc. in the ATLAS measurement are smaller than stat. unc. and dominated by MC stat.
- probably, other systematics can be reduced further by measuring in fiducial lepton p_T , γ phase space

	70 < $m^{\ell\ell}$ < 80 GeV			80 < $m^{\ell\ell}$ < 100 GeV				100 < $m^{\ell\ell}$ < 125 GeV		
$ \gamma^{\ell\ell} $	0 – 0.8	0.8 – 1.6	1.6 – 2.5	0 – 0.8	0.8 – 1.6	1.6 – 2.5	2.5 – 3.6	0 – 0.8	0.8 – 1.6	1.6 – 2.5
Central value	–0.0681	–0.2684	–0.5087	0.0195	0.0448	0.0923	0.1445	0.0975	0.3311	0.6722
	Uncertainties			Uncertainties				Uncertainties		
Total	0.0176	0.0199	0.0391	0.0015	0.0016	0.0026	0.0046	0.0086	0.0099	0.0234
Stat.	0.0149	0.0160	0.0324	0.0013	0.0013	0.0021	0.0037	0.0073	0.0079	0.0188
Syst.	0.0093	0.0119	0.0220	0.0008	0.0008	0.0014	0.0027	0.0045	0.0062	0.0139
PDF (meas.)	0.0004	0.0044	0.0046	0.0001	0.0002	0.0004	0.0008	0.0009	0.0015	0.0050
p_T^Z modelling	0.0028	0.0031	0.0058	0.0003	0.0003	0.0004	0.0007	0.0014	0.0015	0.0033
Leptons	0.0044	0.0063	0.0095	0.0004	0.0003	0.0005	0.0010	0.0019	0.0040	0.0071
Background	< 0.0001	0.0008	0.0040	< 0.0001	0.0001	< 0.0001	0.0001	0.0006	0.0015	0.0023
MC stat.	0.0083	0.0089	0.0180	0.0007	0.0007	0.0012	0.0023	0.0038	0.0042	0.0102

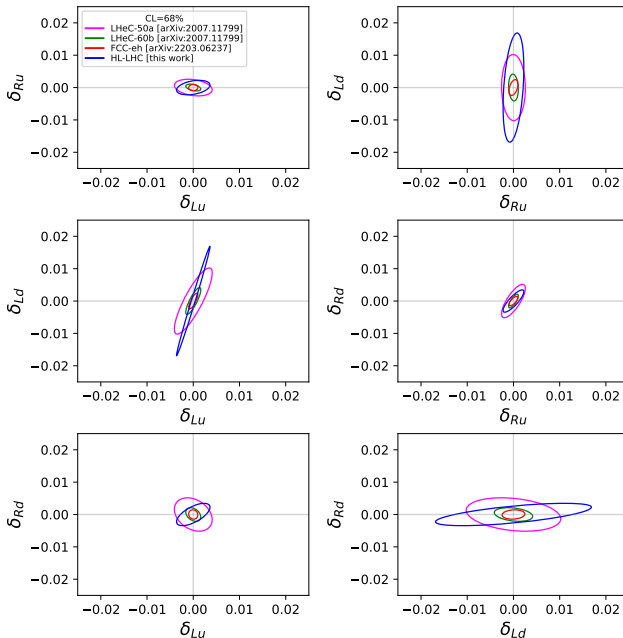
Quick check of AFB code:

- modifications to AFB reaction code need to be done to support $p\bar{p}$
- integration over the angle needs to be changed (in many places)

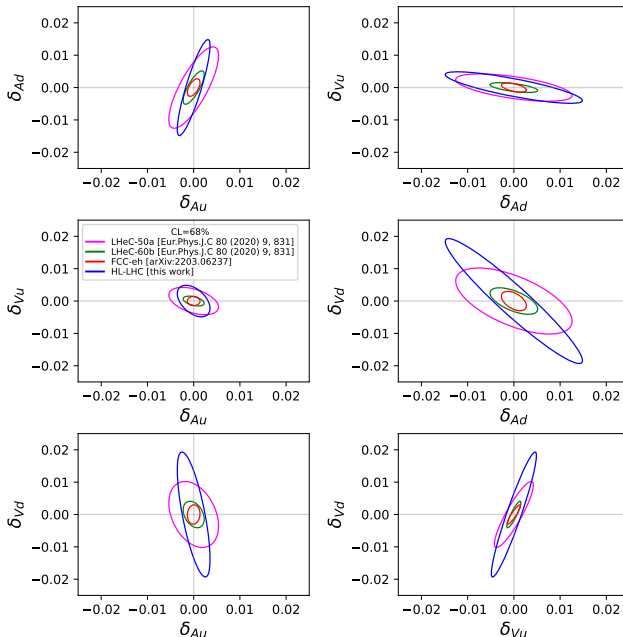
New plots: comparison with existing data



New plots: comparison with future data

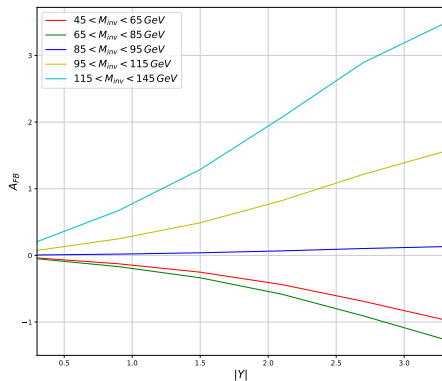
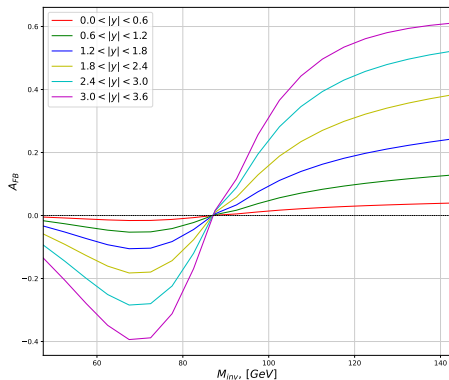


New plots: comparison with future data

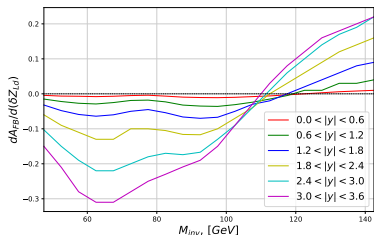
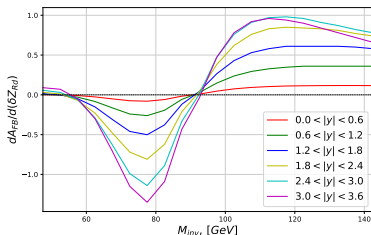
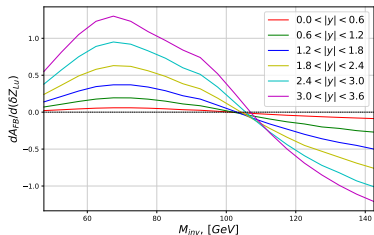
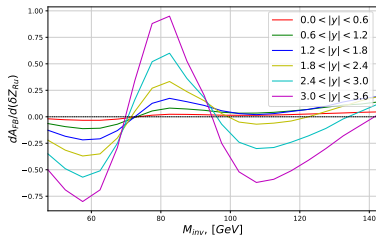


BACKUP

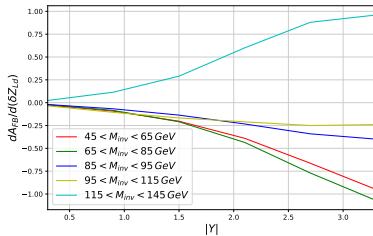
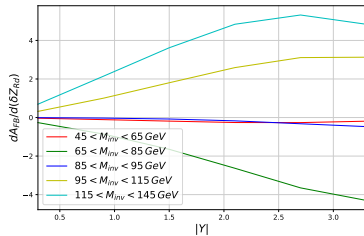
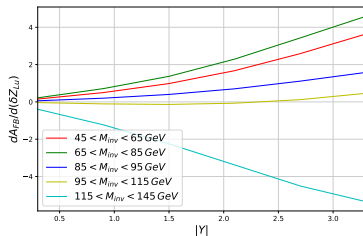
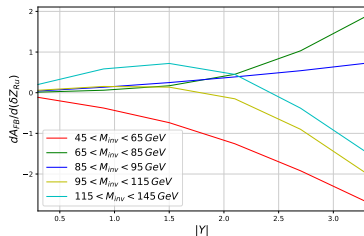
Paper plots



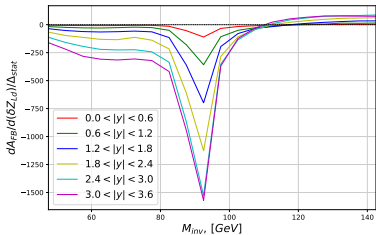
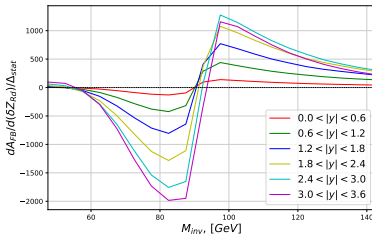
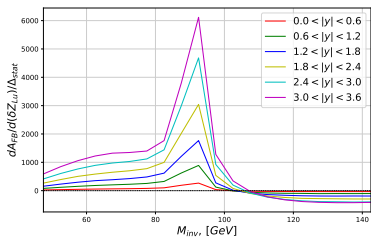
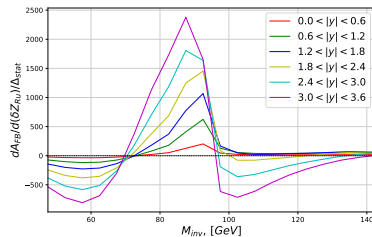
Paper plots



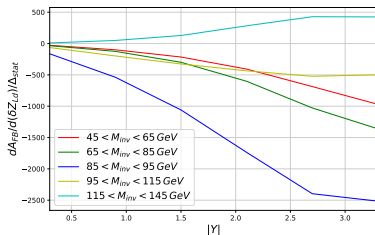
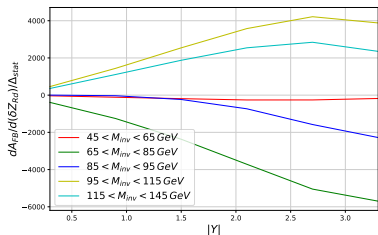
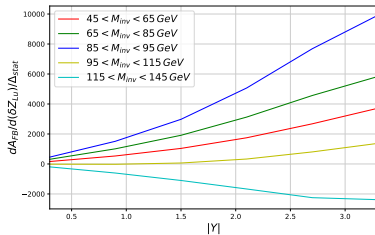
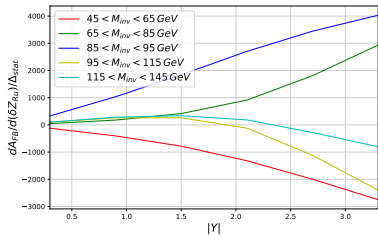
Paper plots



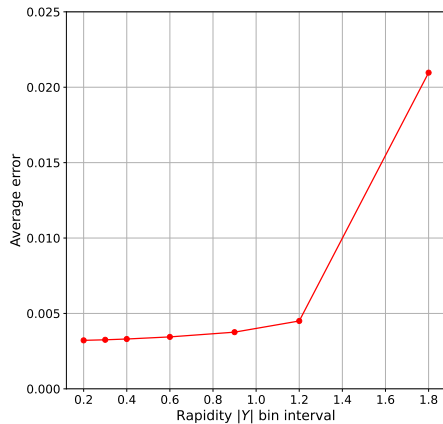
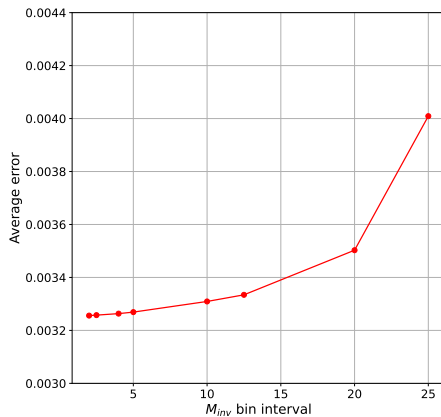
Paper plots



Paper plots



Paper plots



Paper plots

