

Common selections for W and Z analysis

Zmumu selection	
Acceptance	at least 2 Z MC muons with $p_T > 15$ GeV $ \eta < 2.5$
Kinematics	2 combined tracks (STACO) $p_T > 15-25$ GeV $ \eta < 2.5$ steps in 2 GeV on both tracks ($p_T > 15, 15 > 17, 17 > 19, 19 \dots$)
Isolation	$\text{nucone40} < 6$, $\text{ptcone40} < 5-15$ GeV steps in 2 GeV on both tracks ($\text{ptcone40} < 5, 5 < 7, 7 < 9, 9 \dots$)
Trigger	mu10, mu20

Wmumu selection	
Acceptance	at least 1 Z MC muons with $p_T > 15$ GeV $ \eta < 2.5$
Kinematics	1 combined tracks (STACO) $p_T > 15-25$ GeV $ \eta < 2.5$ steps in 2 GeV ($p_T > 15 > 17 > 19 \dots$)
MET	apply or not ??? > 20 GeV , using HadRecoil instead ??
Isolation	$\text{nucone40} < 6$, $\text{ptcone40} < 5-15$ GeV steps in 2 GeV ($\text{ptcone40} < 5 < 7 < 9 \dots$)
Trigger	mu10, mu20

D3PD N9 (misaligned samples)

<https://twiki.cern.ch/twiki/bin/view/AtlasProtected/MisalignedSamples>

user09.MassimilianoBellomo.ganga.PythiaZmumu_1Lepton.e347_s462_r635_ewpa336.1
user09.MassimilianoBellomo.ganga.PythiaZmumu_1Lepton_misal30um_r635_ewpa336.4
user09.MassimilianoBellomo.ganga.PythiaZmumu_1Lepton_misal100um_r635_ewpa336.4
user09.MassimilianoBellomo.ganga.PythiaZmumu_1Lepton_misal200um_r635_ewpa336.4
user09.MassimilianoBellomo.ganga.PythiaZmumu_1Lepton_misal500um_r635_ewpa336.1
user09.MassimilianoBellomo.ganga.PythiaZmumu_1Lepton_ms100indcscDAY1_e347_s462_d154_ewpa336.1
user09.MassimilianoBellomo.ganga.PythiaZmumu_1Lepton_misalMS_500u_Zmumu_1Lepton_e347_s462_d154_ewpa336
user09.MassimilianoBellomo.ganga.PythiaZmumu_1Lepton_misalMS_200u_Zmumu_1Lepton_e347_s462_d154_ewpa336
user09.MassimilianoBellomo.ganga.PythiaWmunu_1Lepton.e352_s462_r635_ewpa336.4
user09.MassimilianoBellomo.ganga.PythiaWmunu_1Lepton_misal500um_ewpa336.5
user09.MassimilianoBellomo.ganga.PythiaWmunu_1Lepton_ms100indcscDAY1_e352_s462_d154_ewpa336.5
user09.MassimilianoBellomo.ganga.PythiaB_bbmu15X.e388_ewpa336_RM1.4
user09.MassimilianoBellomo.ganga.PythiaB_bbmu15X.e388_ewpa336_FR4.1
user09.MassimilianoBellomo.ganga.PythiaB_bbmu15X.e388_ewpa336_FR.4
user09.MassimilianoBellomo.ganga.PythiaB_bbmu15X.e388_ewpa336_NA.4
user09.MassimilianoBellomo.ganga.PythiaB_ccmu15X.recon.AOD.e401_a84_ewpa336.4
user09.MassimilianoBellomo.ganga.J5_pythia_jetjet.e344_s479_r635_ewpa336.1
user09.MassimilianoBellomo.ganga.PythiaB_bbmu15X_ms100indcscDAY1.e388_a84_ewpa336
user09.MassimilianoBellomo.ganga.PythiaWtaunu_1Lepton.e352_s462_r635_ewpa336.4
user09.MassimilianoBellomo.ganga.PythiaZtautau.e347_s462_r635_ewpa336.1
user09.MassimilianoBellomo.ganga.PythiaDrellYanLowM_M10mu10.e389_s462_r635_ewpa336.5
user09.MassimilianoBellomo.ganga.PythiaDrellYanLowMtautau_M10mu10.e395_s462_r635_ewpa336.5
user09.MassimilianoBellomo.ganga.T1_McAtNlo_Jimmy.e357_s462_r635_ewpa336.1
user09.AntonioSalvucci.ganga.T1_McAtNlo_ms100indcscDAY1_r635_ewpa336.0
user09.AntonioSalvucci.ganga.T1_McAtNlo_misal500um_r635_ewpa336.0

D3PD N10 proposal

- New D3PD production to update
 - ★ CB-MC association cone from 0.05 to 0.2
 - to cure for low efficiency in CBMS step at high eta
 - ★ Link from CB to MS track and viceversa
 - to not rely on associations
 - ★ TPTool (Tag&Probe)
 - add also same-sign tag-probe pairs to study backgrounds
 - add invariant mass cut $M > 40$ GeV instead of gamma based window
- Start the next week
 - ★ If you need new variables to be added please tell me before Friday