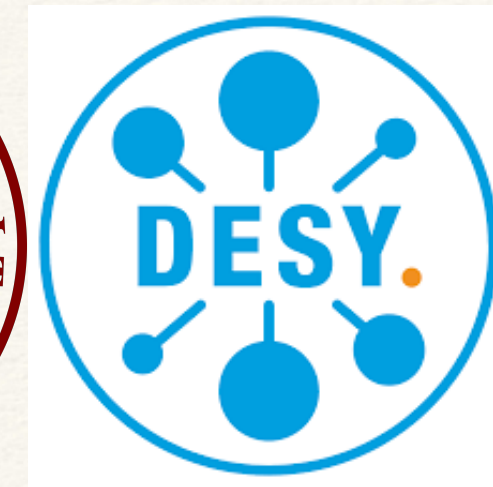




Trigger Object in NanoAODplus

Qun Wang

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Ministry of Human Resources
and Social Security

HELMHOLTZ

RESEARCH FOR
GRAND CHALLENGES

Introduction

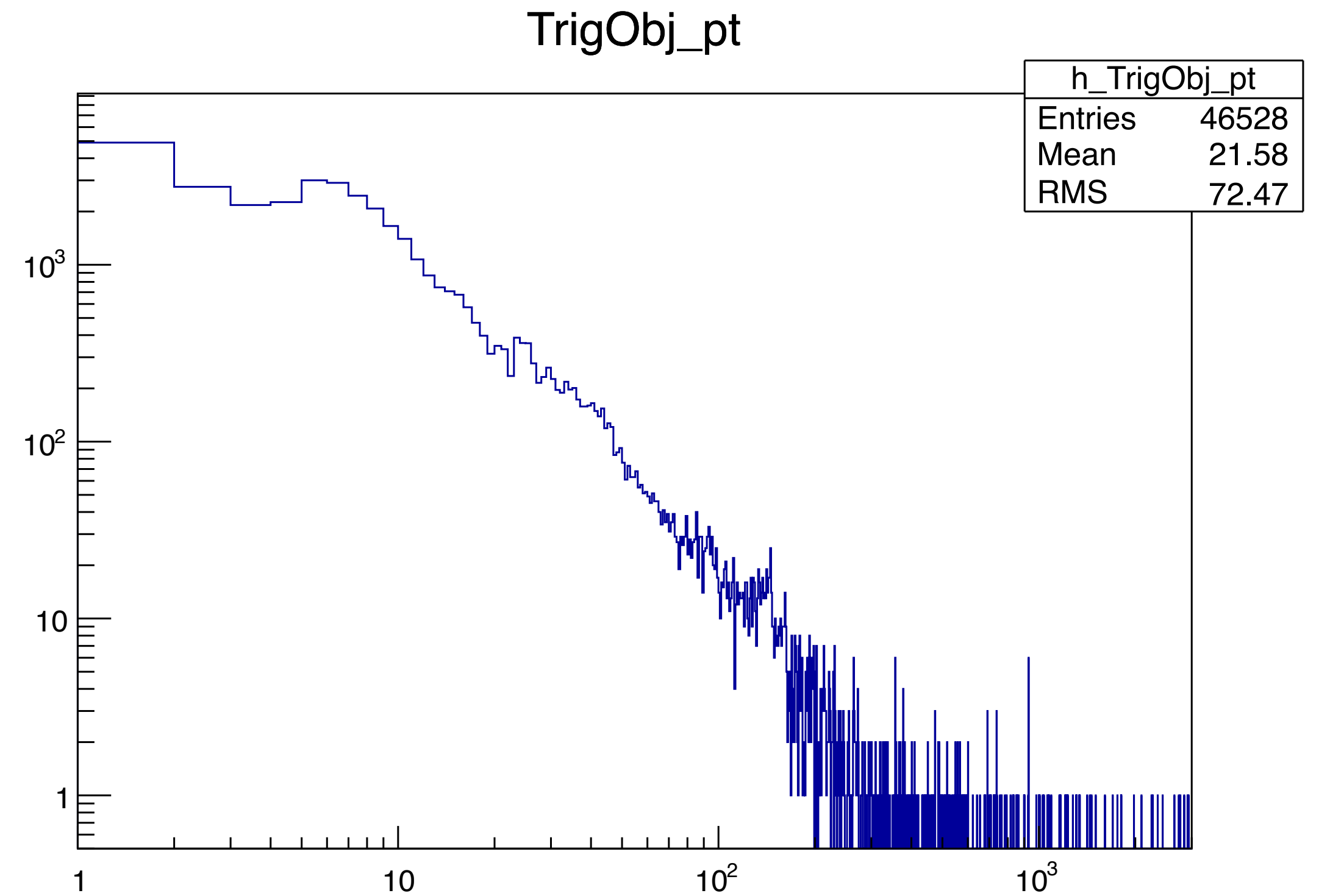
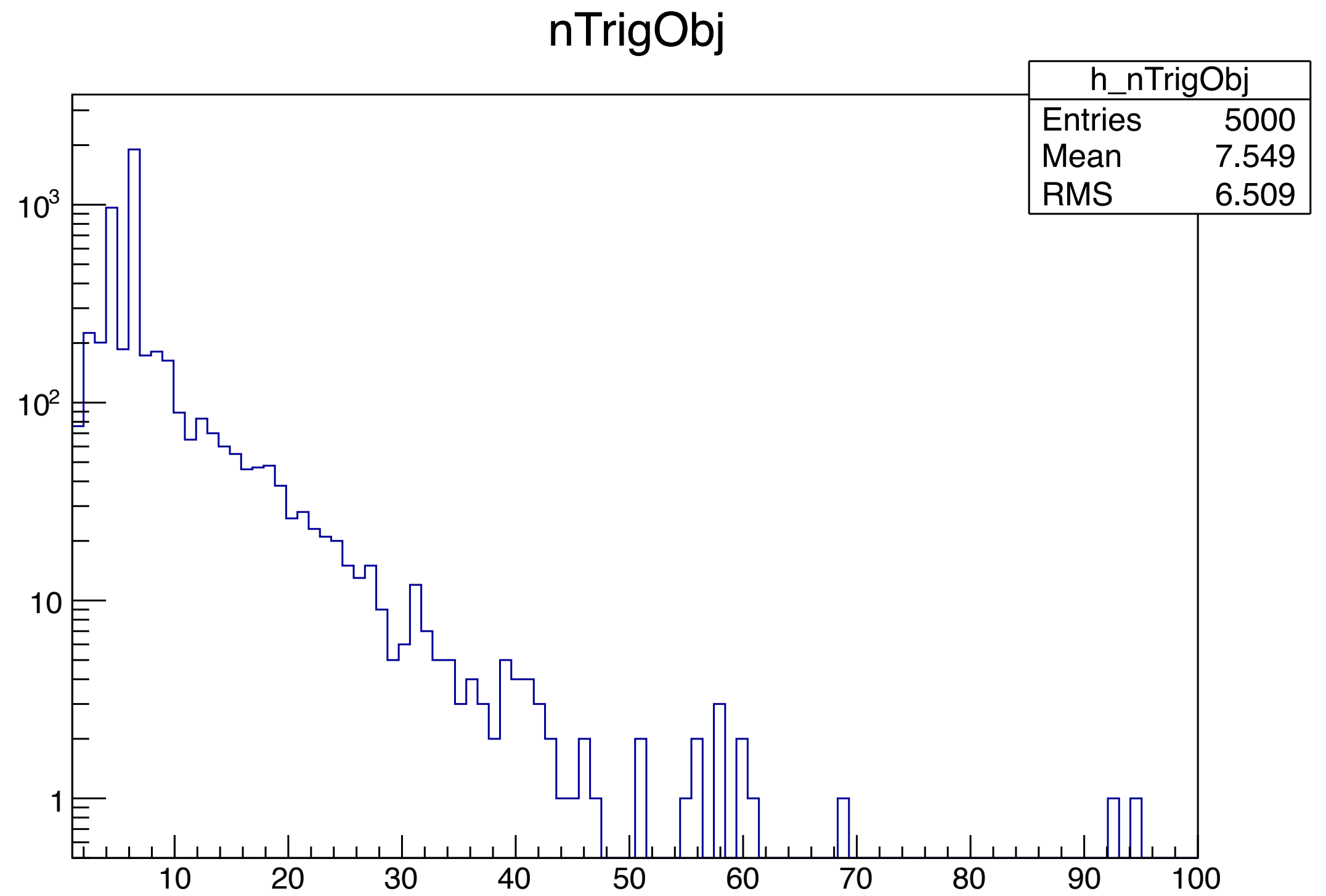
- ❖ Trigger Object: store and access the trigger matching information.
- ❖ Official NanoAOD:

TrigObj [\[back to top\]](#)

Object property	Type	Description
TrigObj_eta	Float_t	eta
TrigObj_filterBits	Int_t	extra bits of associated information: 1 = CaloIdL_TrackIdL_IsoVL, 2 = 1e (WPTight), 4 = 1e (WPLoose), 8 = OverlapFilter PFTau, 16 = 2e, 32 = 1e-1mu, 64 = 1e-1tau, 128 = 3e, 256 = 2e-1mu, 512 = 1e-2mu, 1024 = 1e (32_L1DoubleEG_AND_L1SingleEGOr) for Electron (PixelMatched e/gamma); 1 = TrkIsoVVL, 2 = Iso, 4 = OverlapFilter PFTau, 8 = 1mu, 16 = 2mu, 32 = 1mu-1e, 64 = 1mu-1tau, 128 = 3mu, 256 = 2mu-1e, 512 = 1mu-2e for Muon; 1 = LooseChargedIso, 2 = MediumChargedIso, 4 = TightChargedIso, 8 = TightID OOSC photons, 16 = HPS, 32 = single-tau + tau+MET, 64 = di-tau, 128 = e-tau, 256 = mu-tau, 512 = VBF+di-tau for Tau; 1 = VBF cross-cleaned from loose iso PFTau for Jet;
TrigObj_id	Int_t	ID of the object: 11 = Electron (PixelMatched e/gamma), 22 = Photon (PixelMatch-vetoed e/gamma), 13 = Muon, 15 = Tau, 1 = Jet, 6 = FatJet, 2 = MET, 3 = HT, 4 = MHT
TrigObj_l1charge	Int_t	charge of associated L1 seed
TrigObj_l1iso	Int_t	iso of associated L1 seed
TrigObj_l1pt	Float_t	pt of associated L1 seed
TrigObj_l1pt_2	Float_t	pt of associated secondary L1 seed
TrigObj_l2pt	Float_t	pt of associated 'L2' seed (i.e. HLT before tracking/PF)
TrigObj_phi	Float_t	phi
TrigObj_pt	Float_t	pt
nTrigObj	UInt_t	

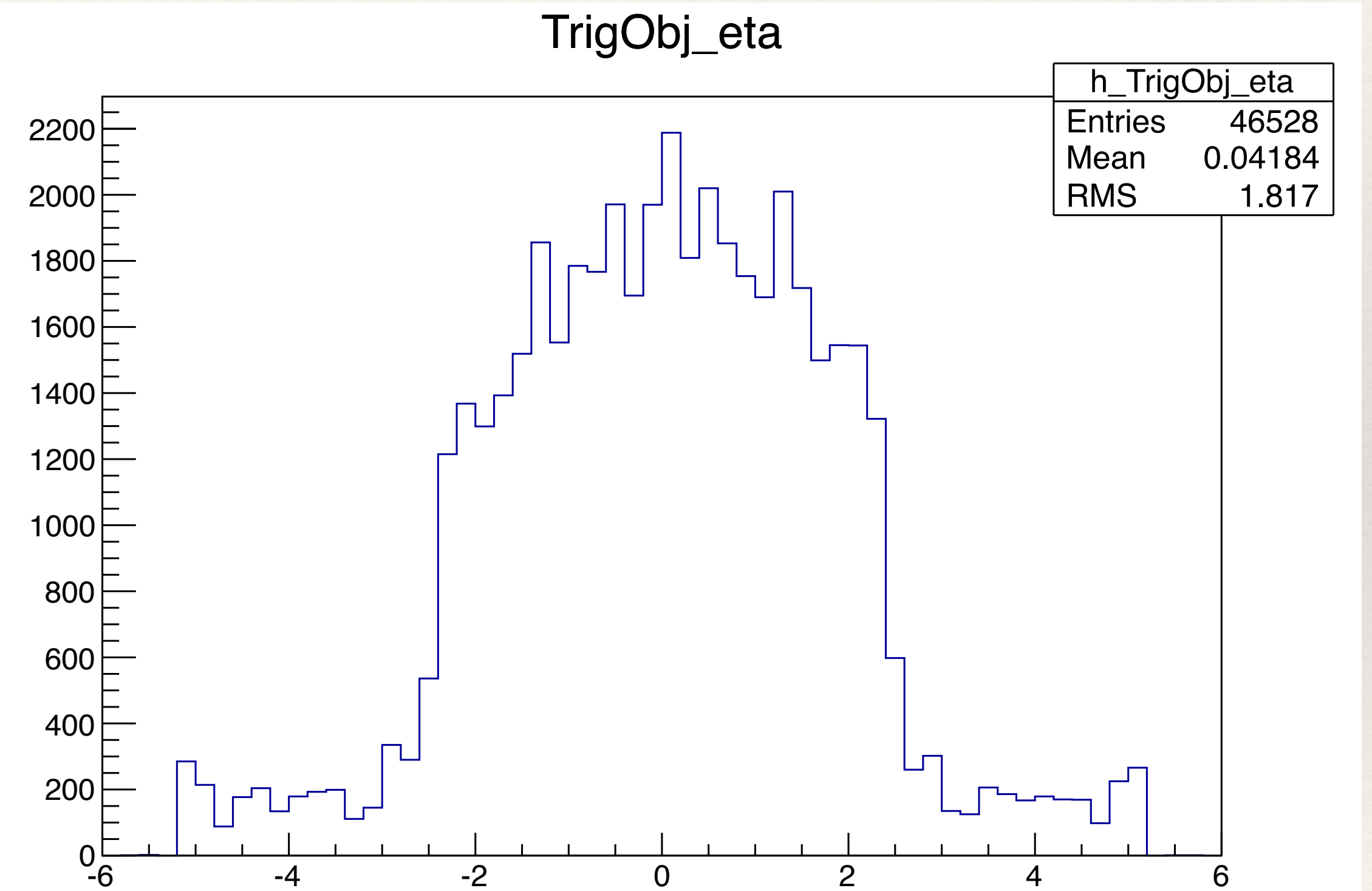
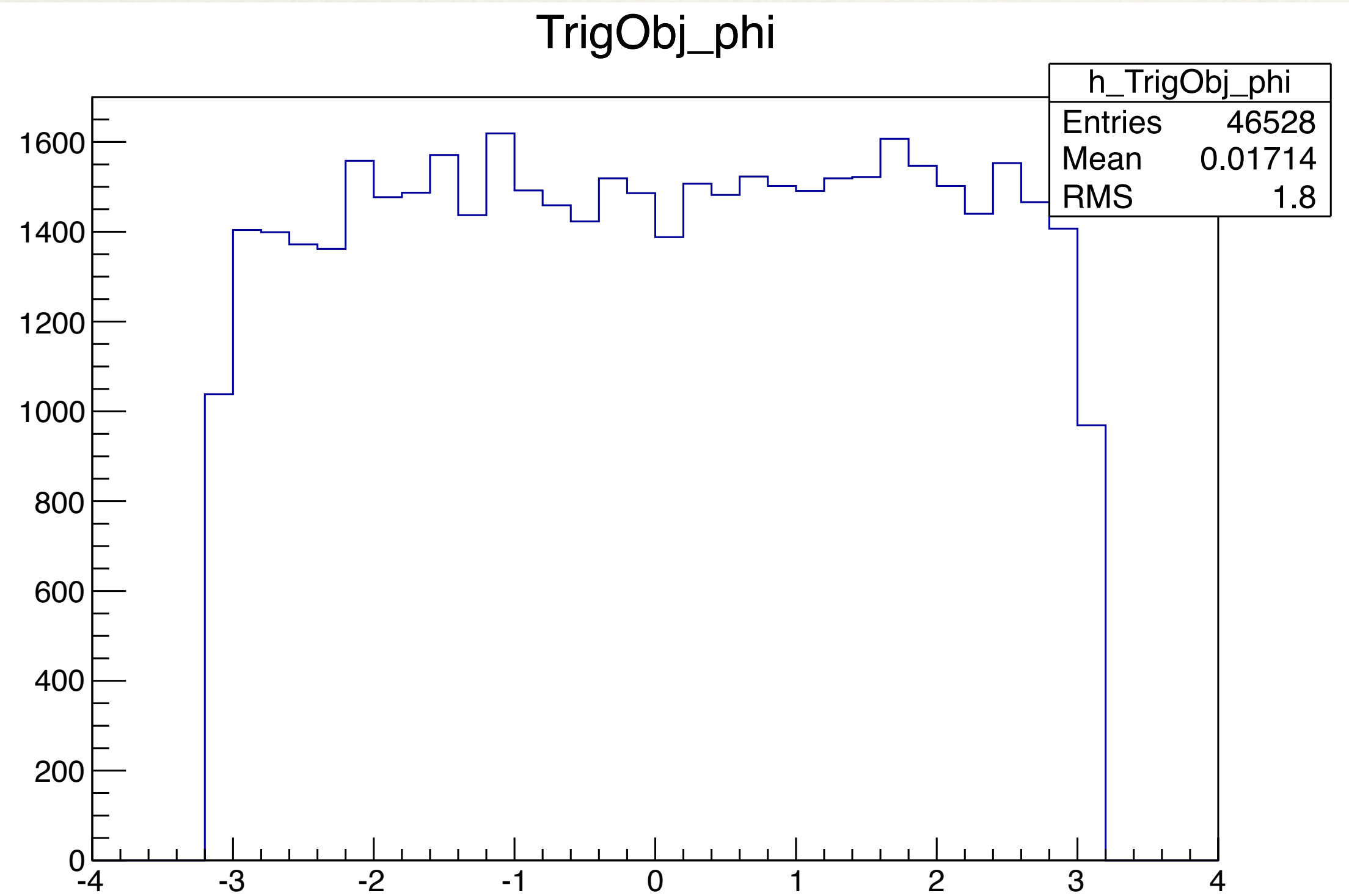
Trigger Object

❖ nTrigObj; TrigObj_pt; TrigObj_eta; TrigObj_phi



Trigger Object

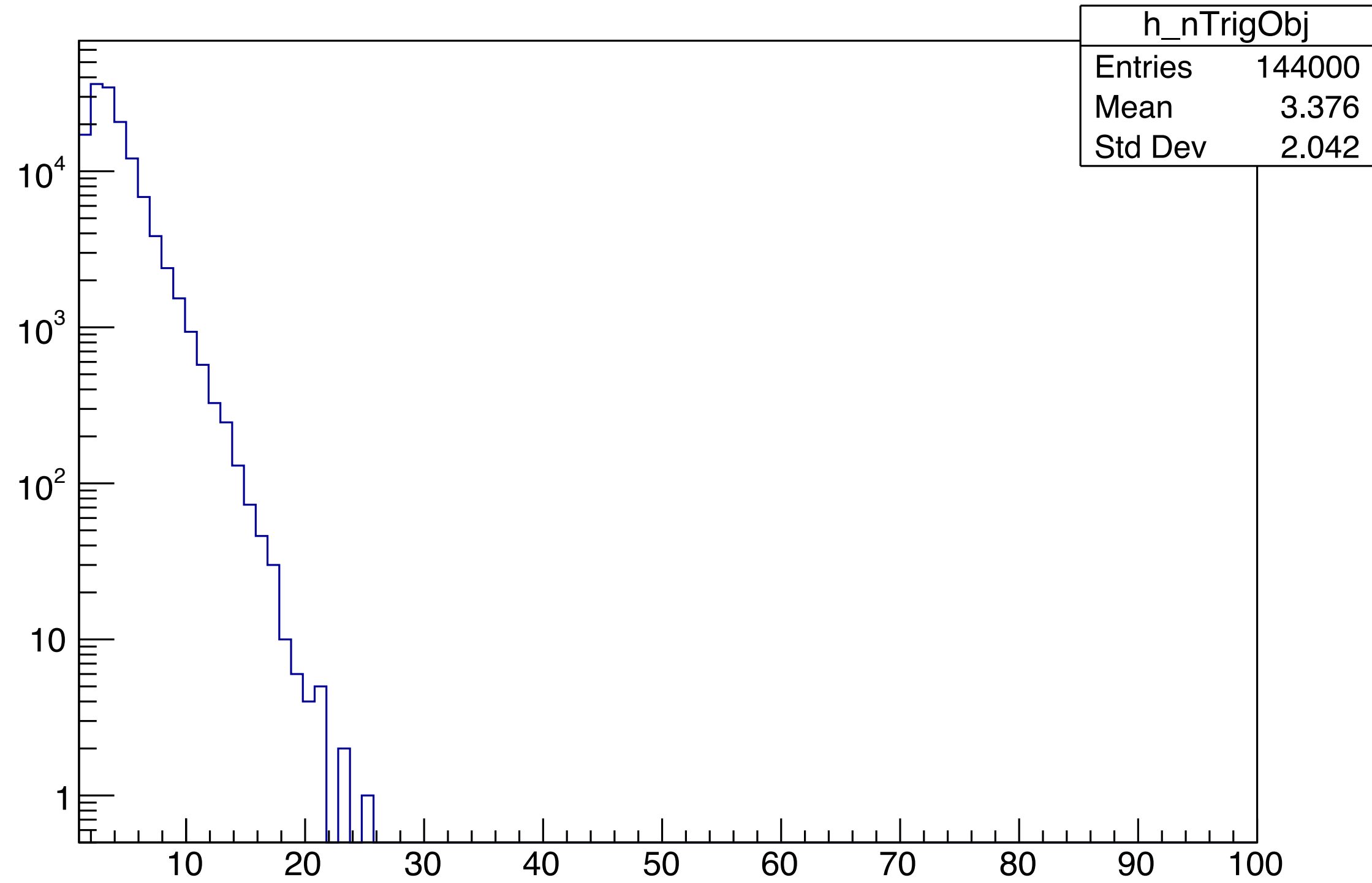
❖ nTrigObj; TrigObj_pt; TrigObj_eta; TrigObj_phi



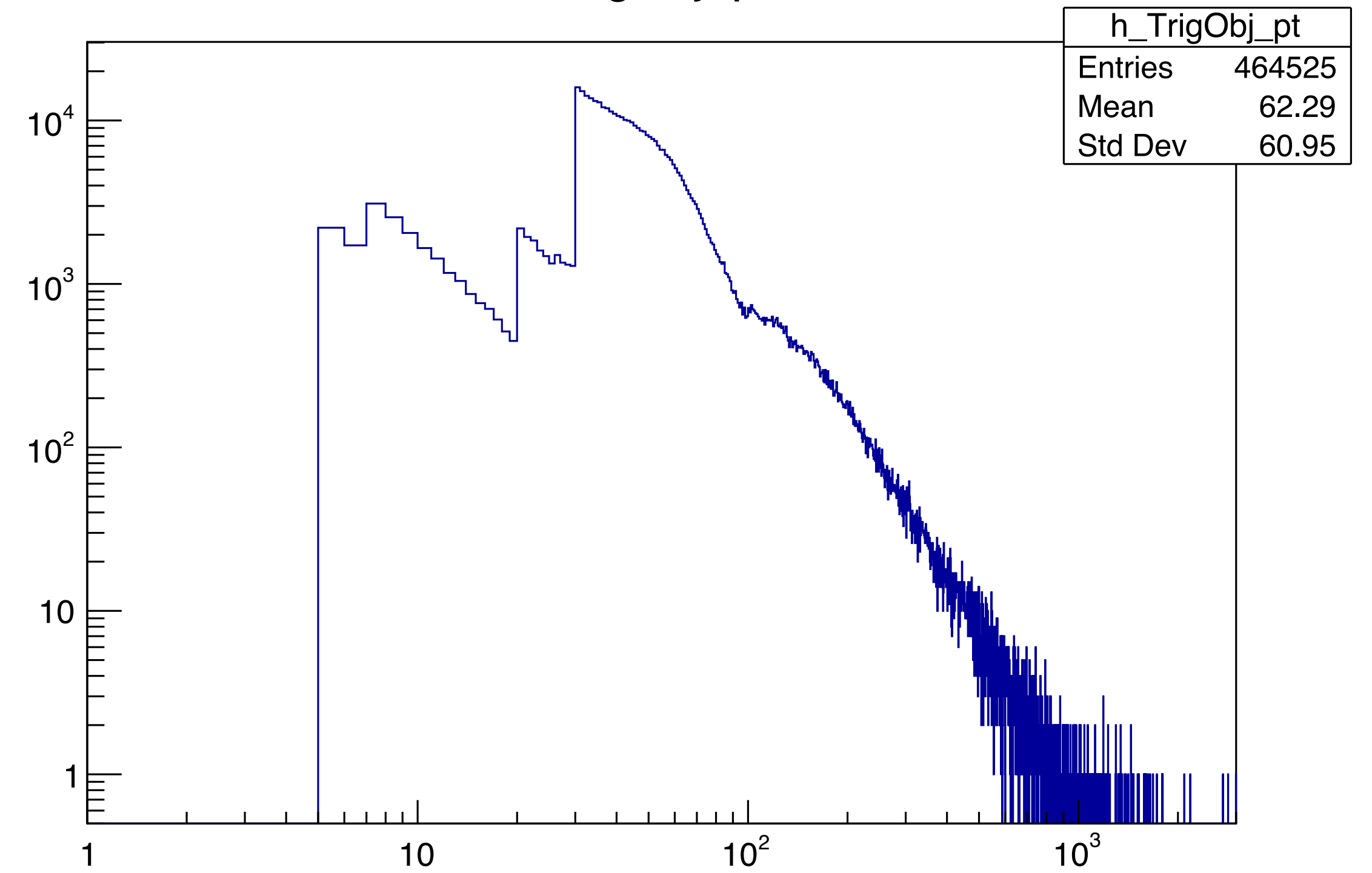
Trigger Object—NanoAOD run2

❖ nTrigObj; TrigObj_pt; TrigObj_eta; TrigObj_phi

nTrigObj



TrigObj_pt



Trigger Object-NanoAOD run2

❖ nTrigObj; TrigObj_pt; TrigObj_eta; TrigObj_phi

