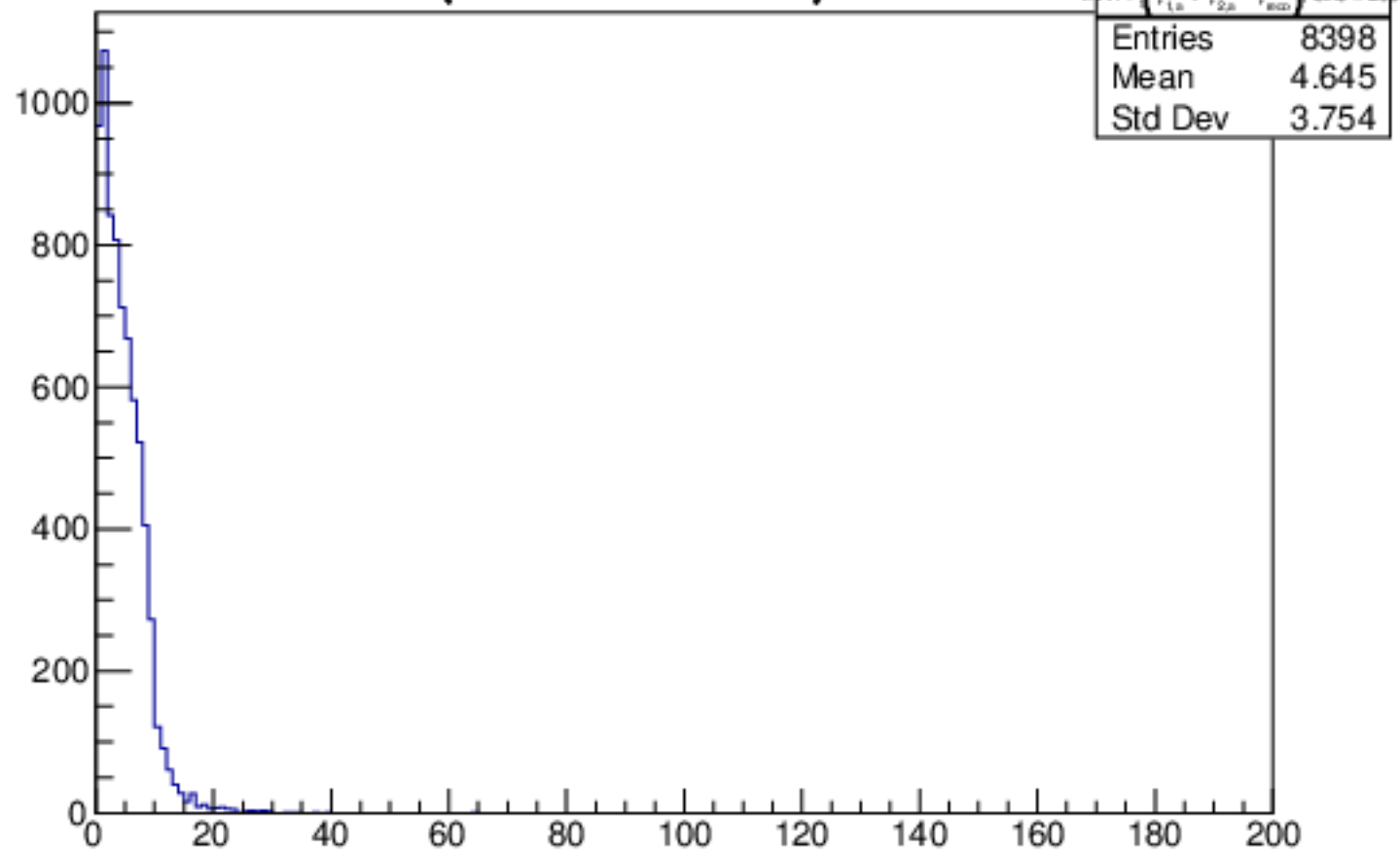
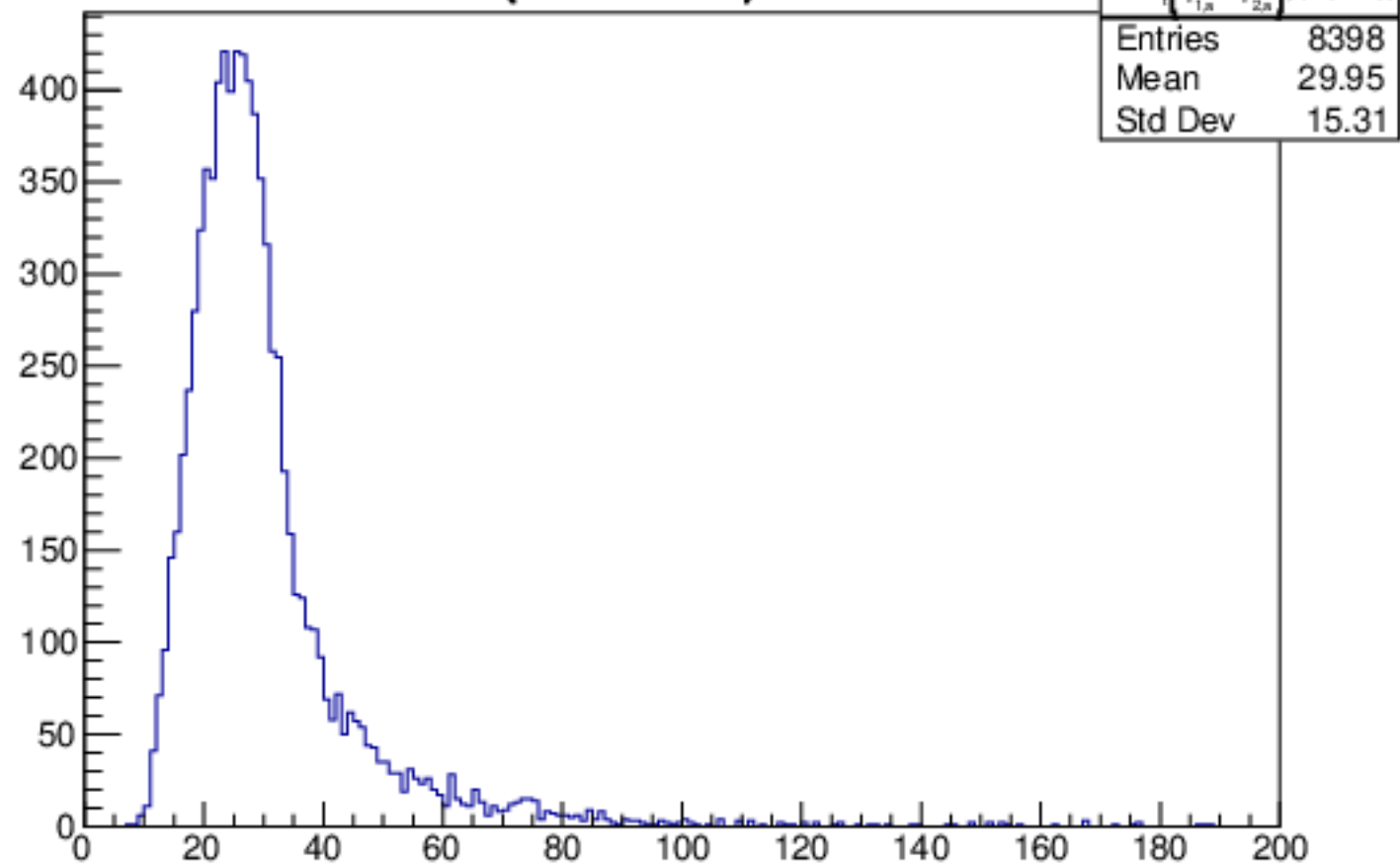


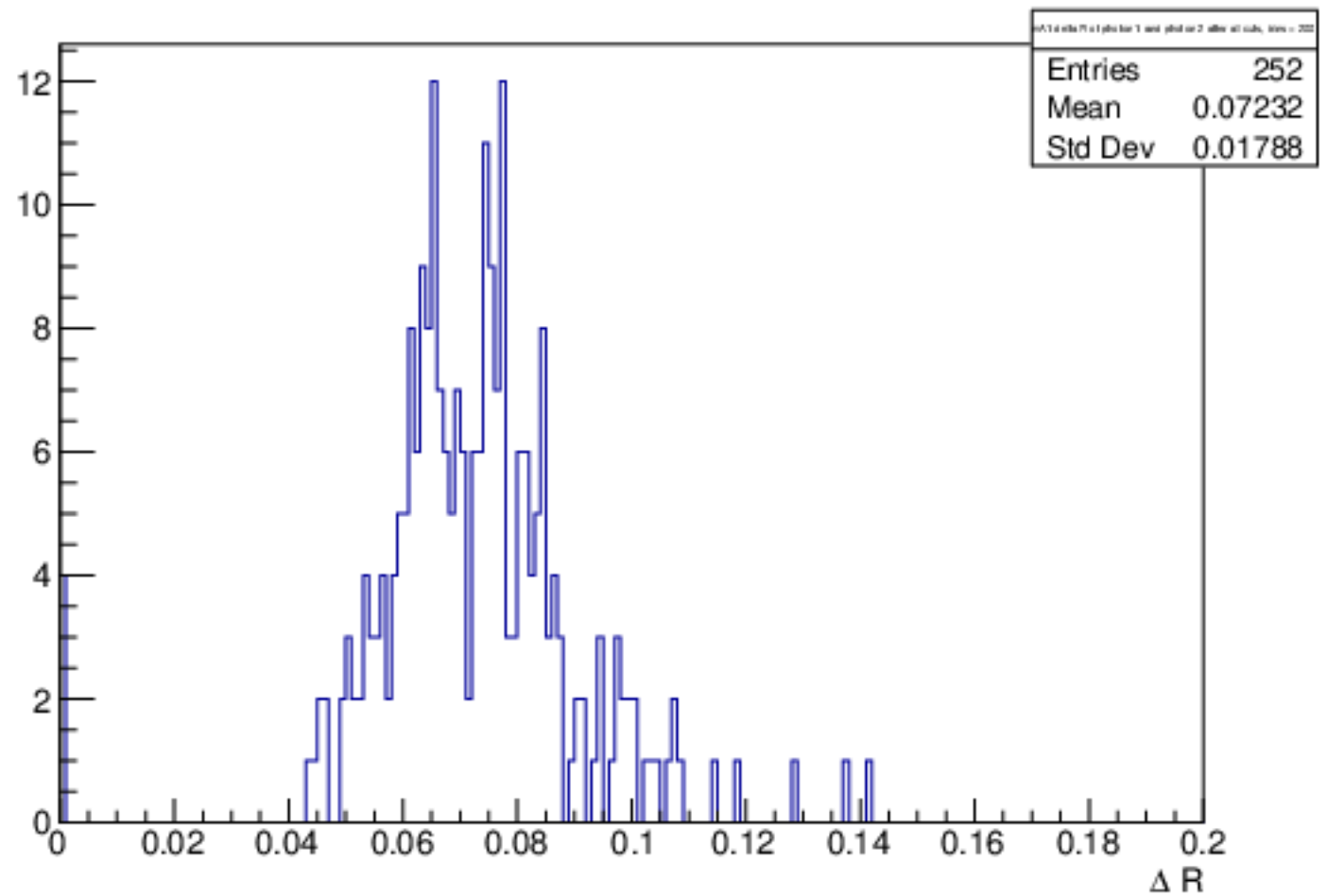
mA1 $P_t(\gamma_{1,a}^t + \gamma_{2,a}^t - \gamma_{\text{reco}})$, bins = 200



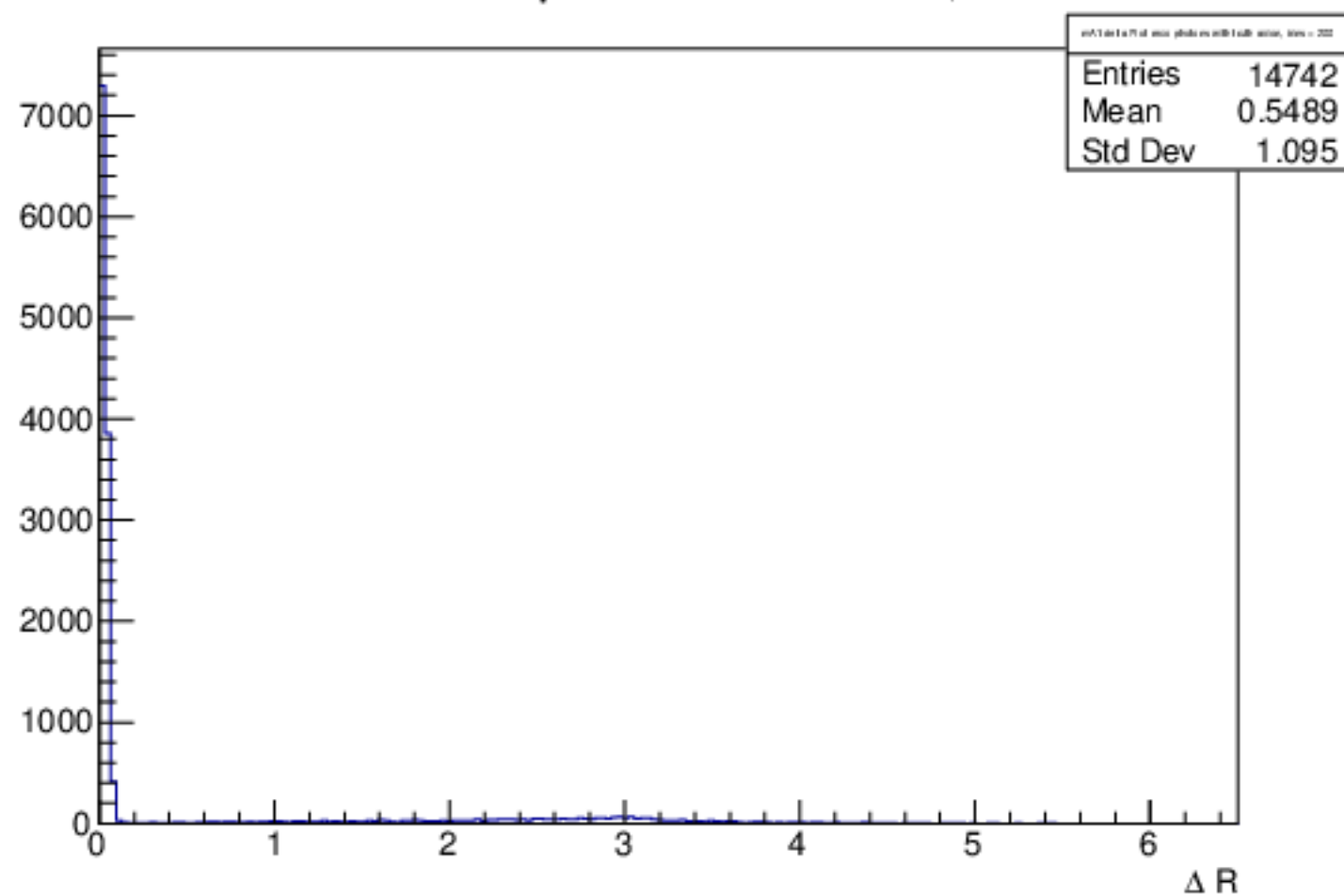
mA1 $P_t(\gamma_{1,a}^t + \gamma_{2,a}^t)$, bins = 200



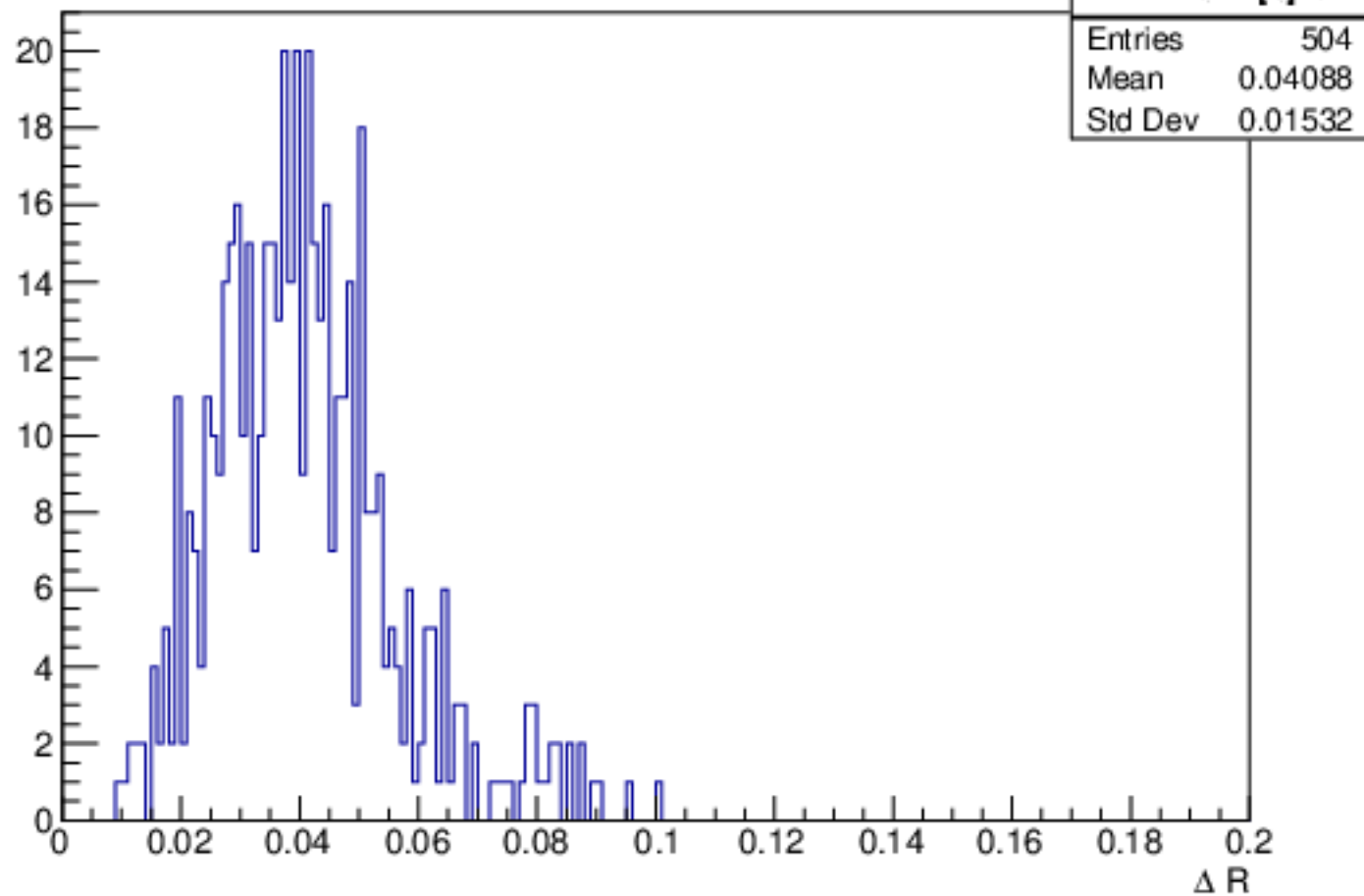
mA1 delta R of photon 1 and photon 2 after all cuts, bins = 200



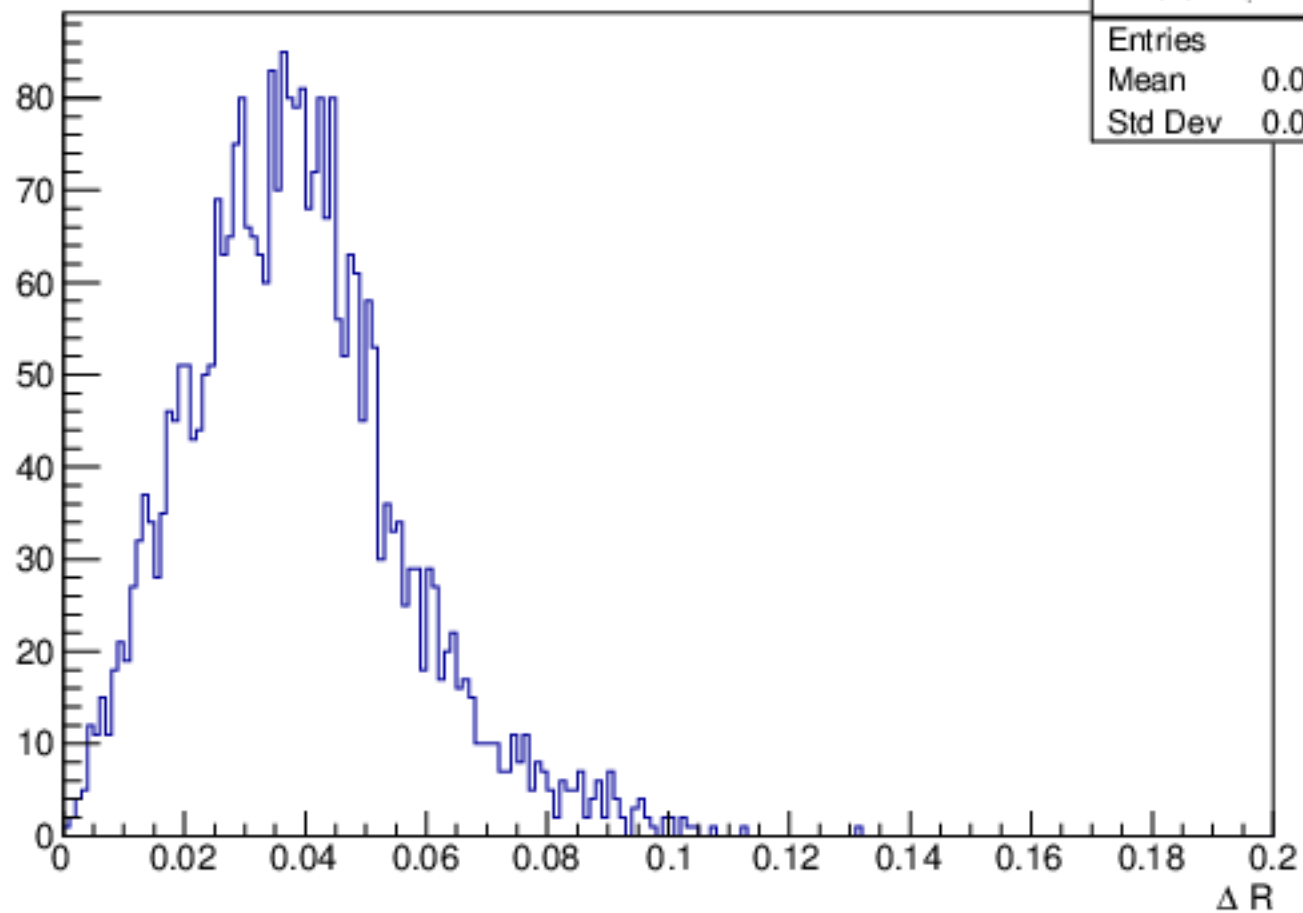
mA1 delta R of reco photons with truth axion, bins = 200



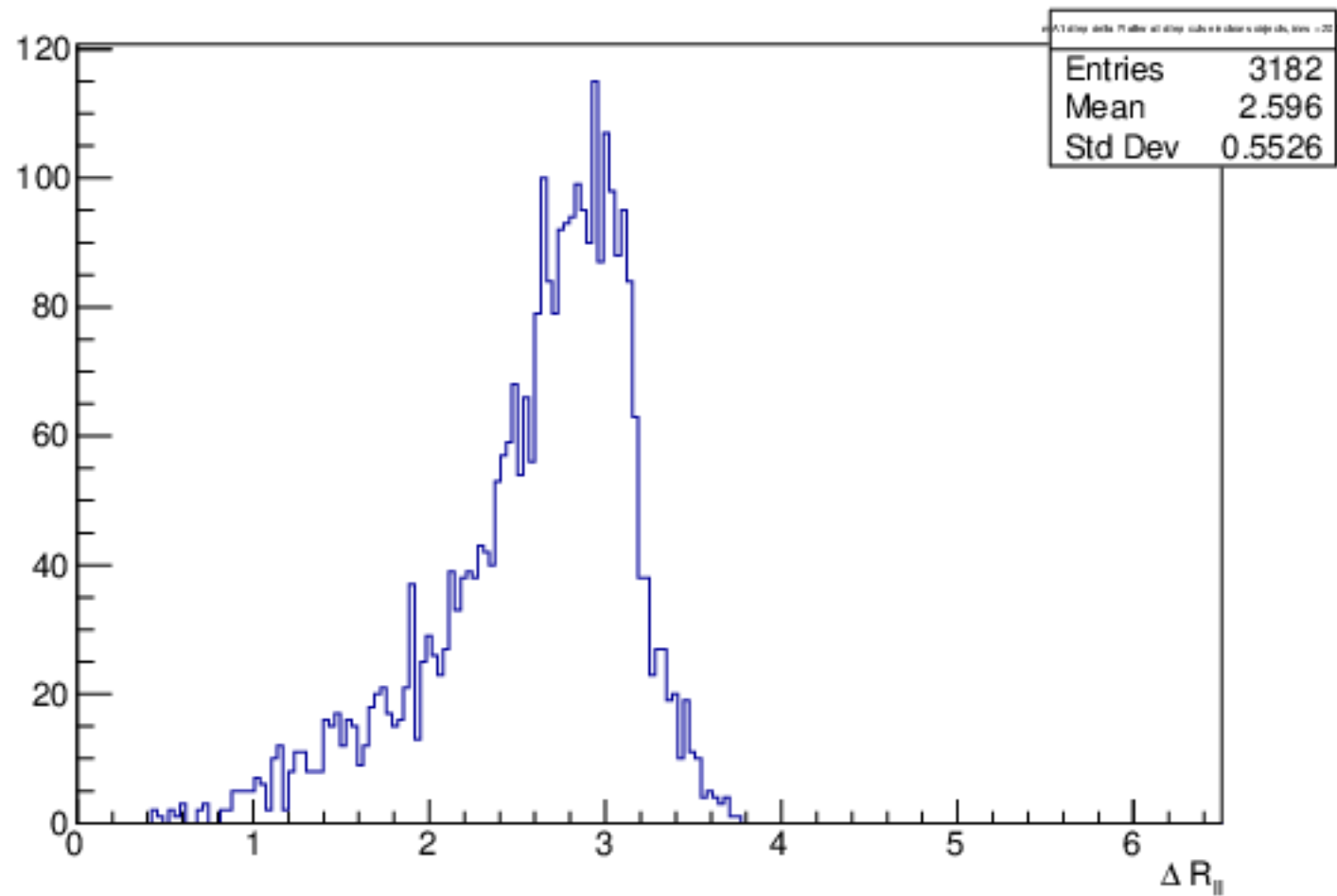
mA1 delta R of reco-photon pairs with $\Delta R_{\gamma,\gamma^*} < 0.2$ and/or $\min(\Delta R_{\gamma,\gamma^*})$ after cuts, bins = 200



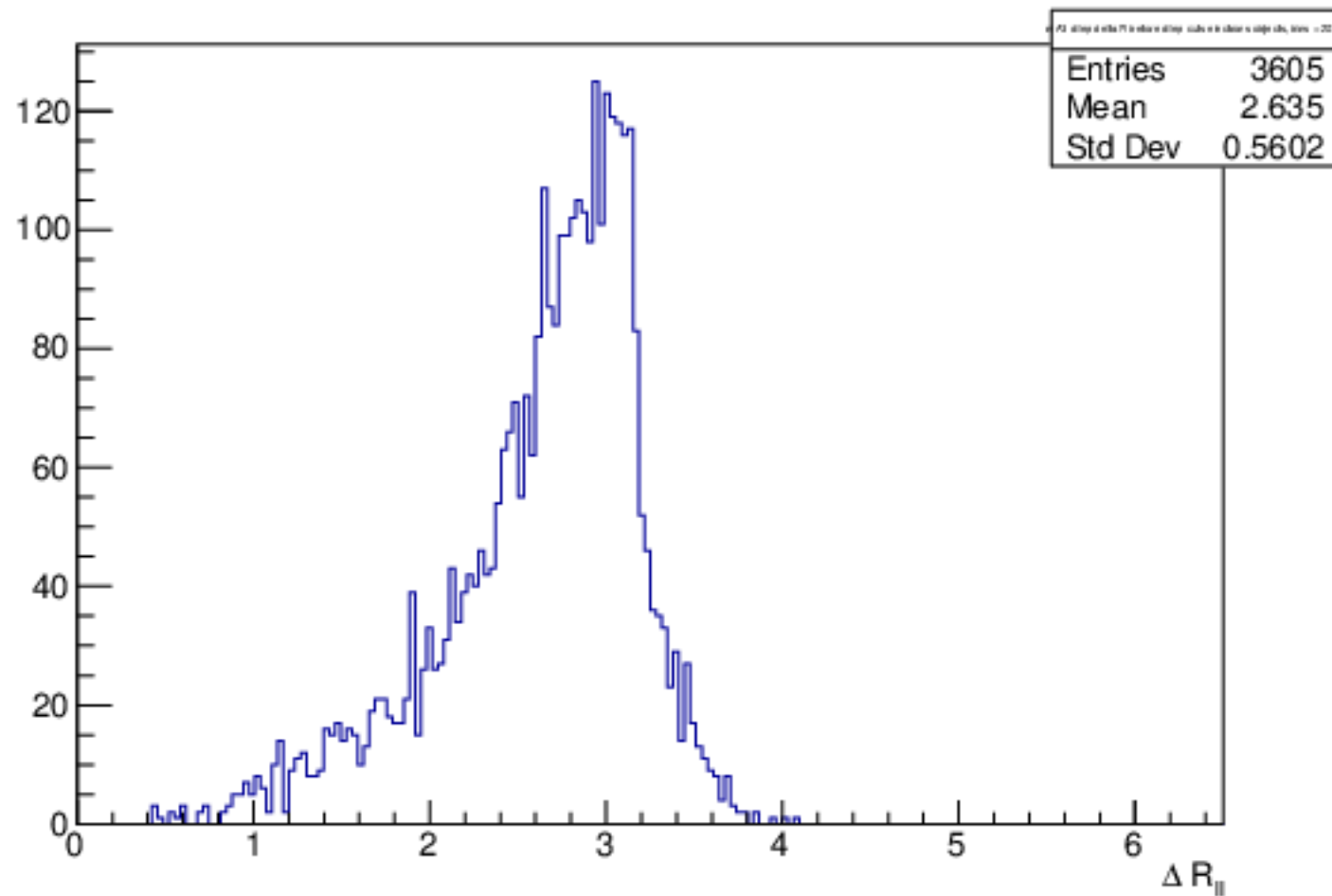
mA1 delta R of reco-photon pairs with $\Delta R_{\gamma_1 \gamma_2^A} < 0.2$ and/or $\min(\Delta R_{\gamma_1 \gamma_2^A})$, bins = 200



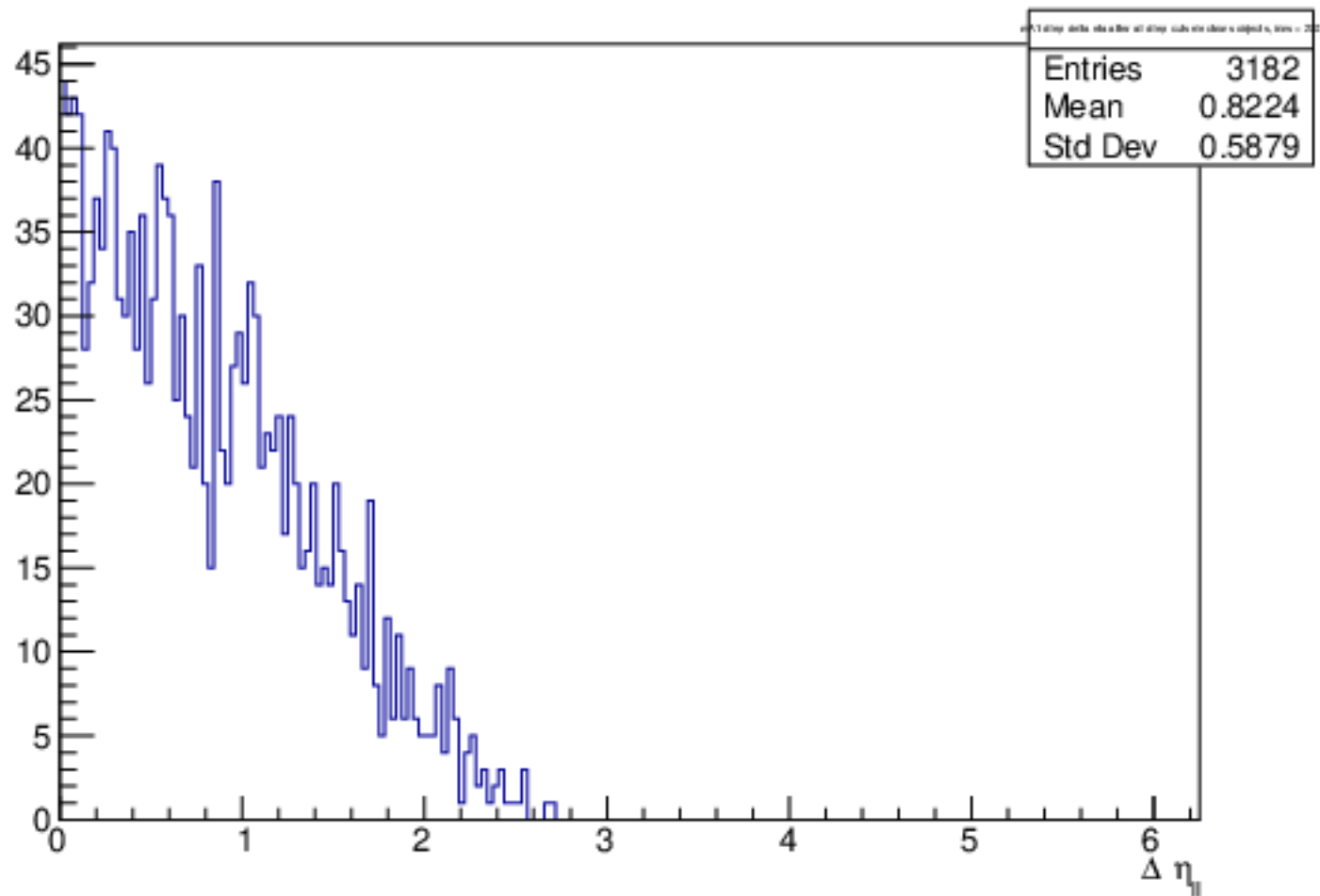
mA1 dilep delta R after all dilep cuts electrons objects, bins = 200



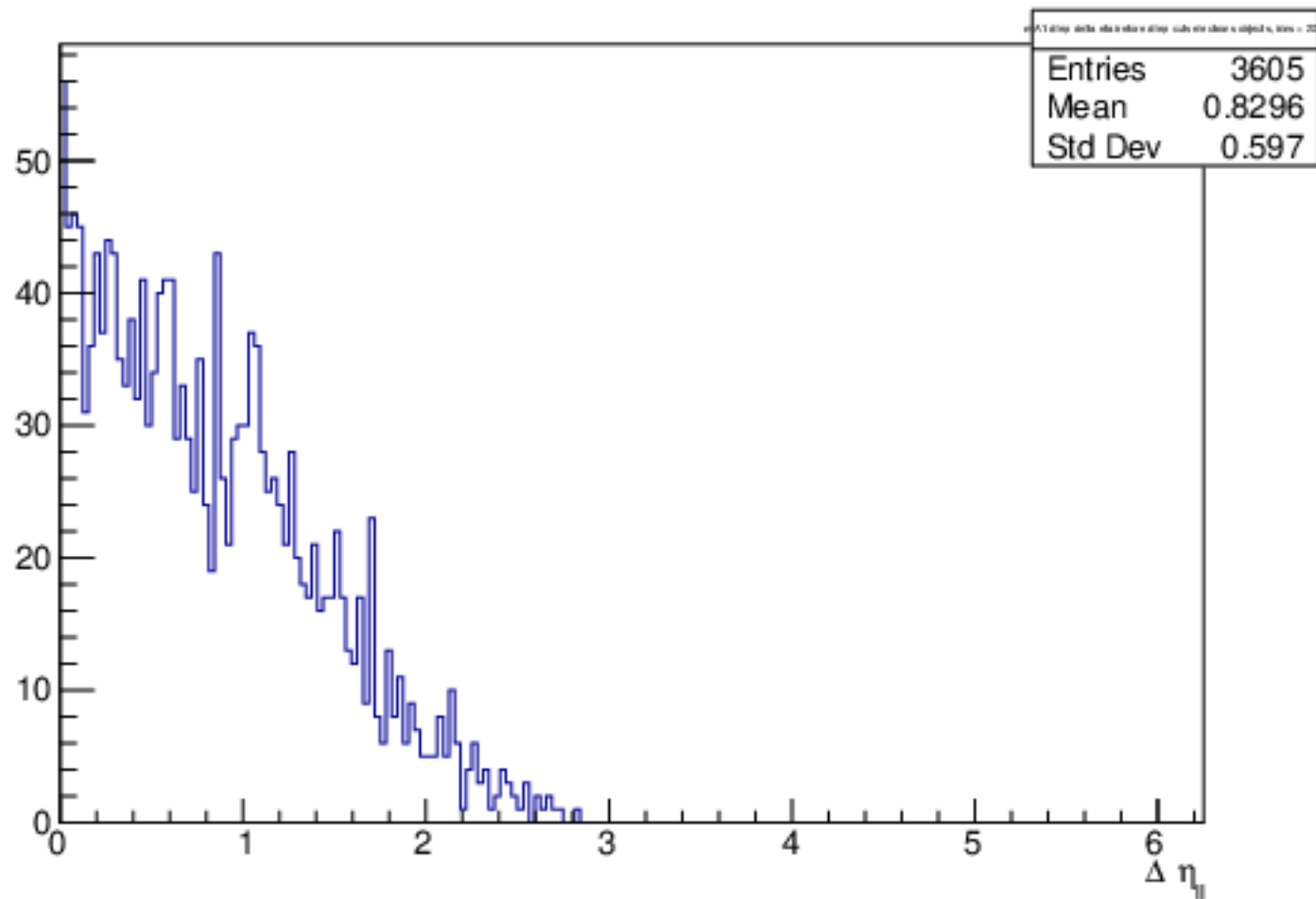
mA1 dilep delta R before dilep cuts electrons objects, bins = 200



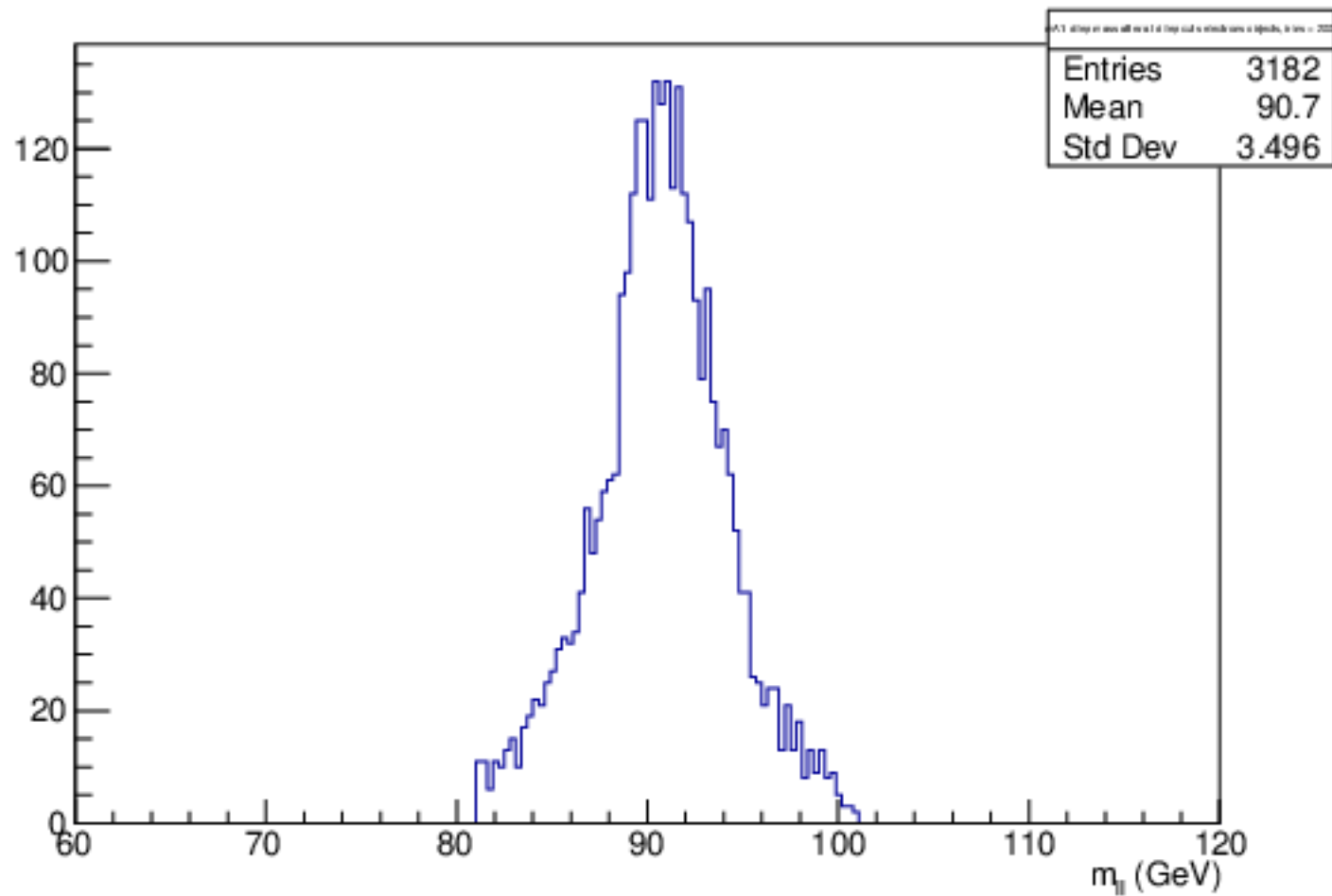
mA1 dilep delta eta after all dilep cuts electrons objects, bins = 200



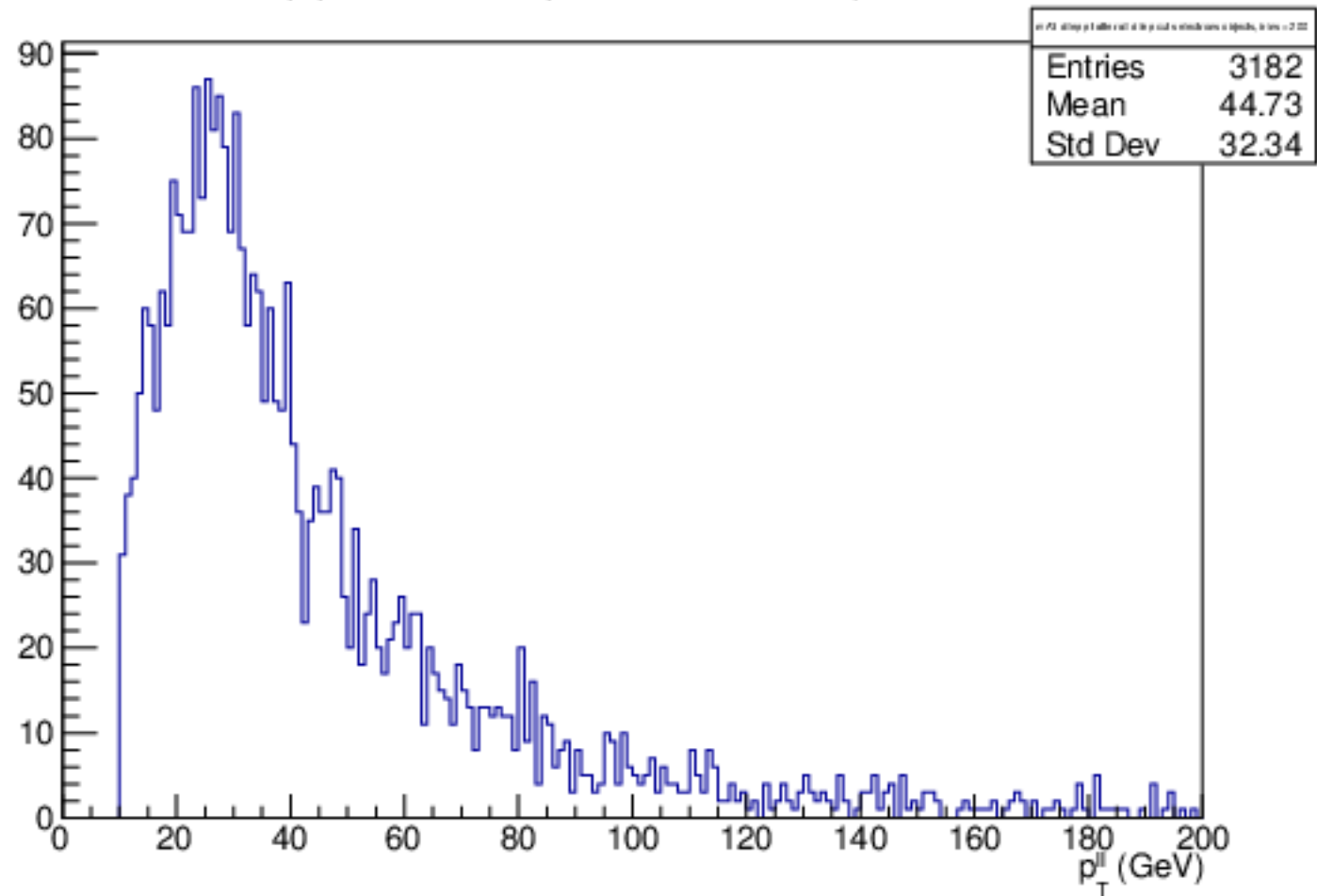
mA1 dilep delta eta before dilep cuts electrons objects, bins = 200



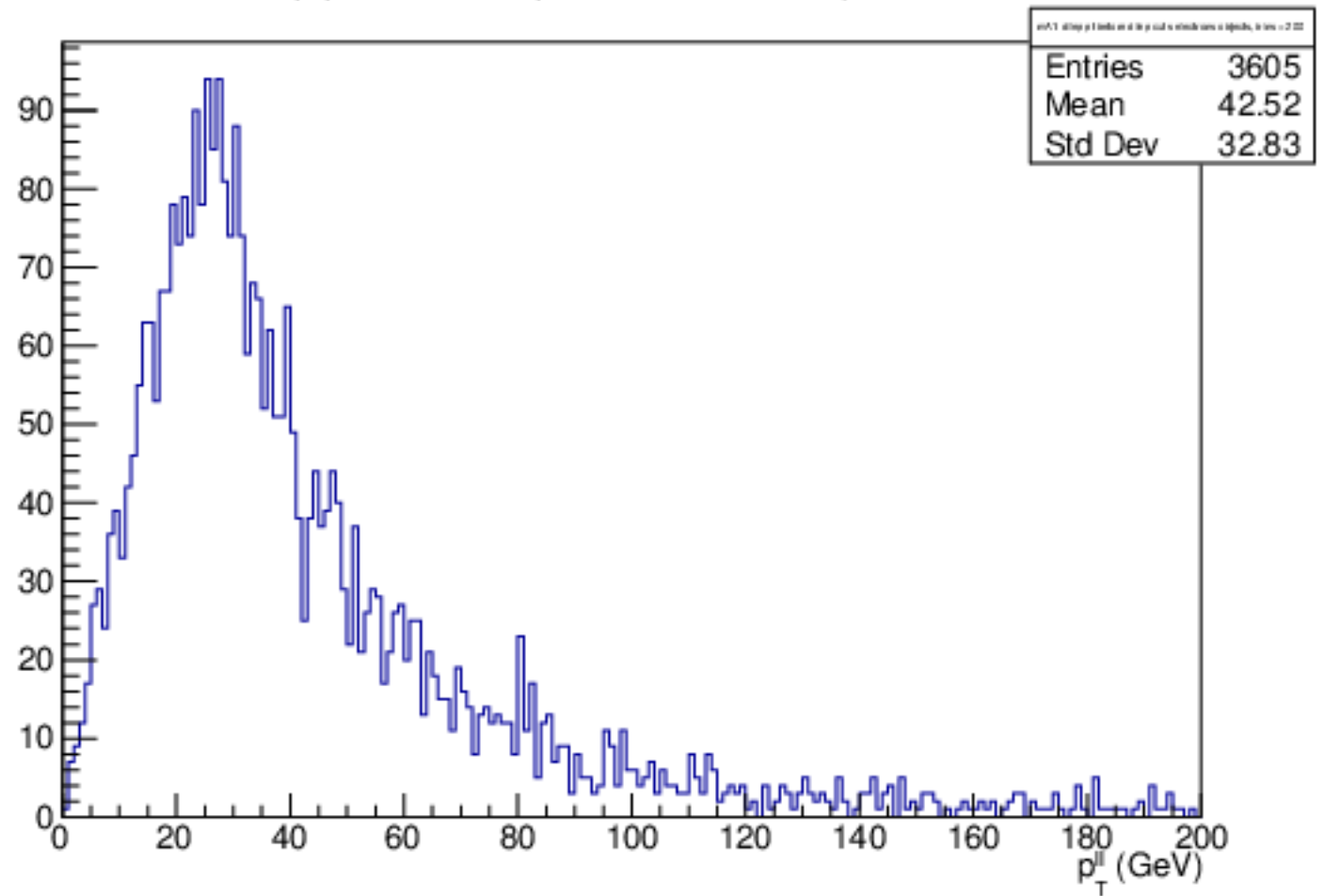
mA1 dilep mass after all dilep cuts electrons objects, bins = 200



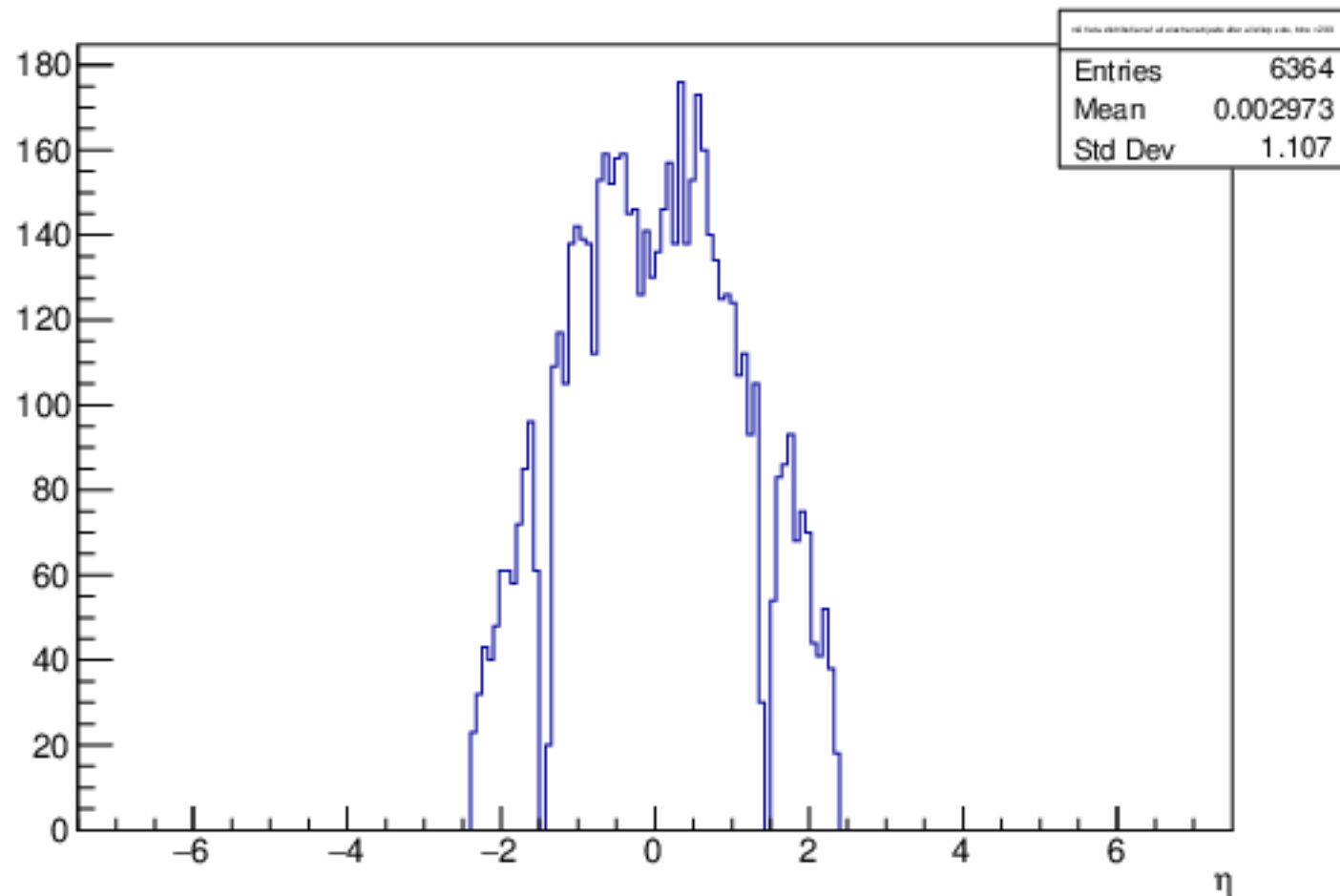
mA1 dilep pt after all dilep cuts electrons objects, bins = 200



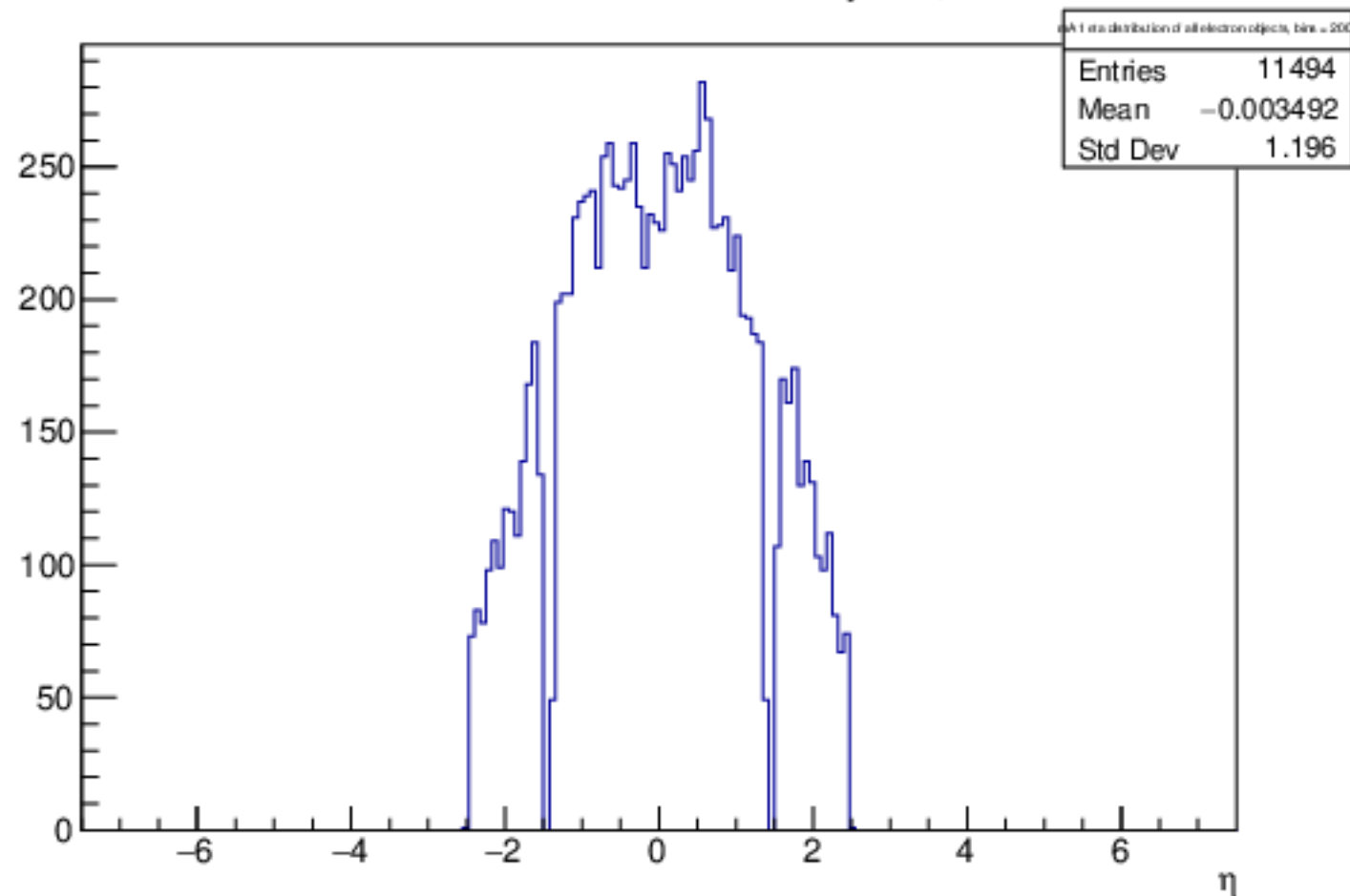
mA1 dilep pt before dilep cuts electrons objects, bins = 200



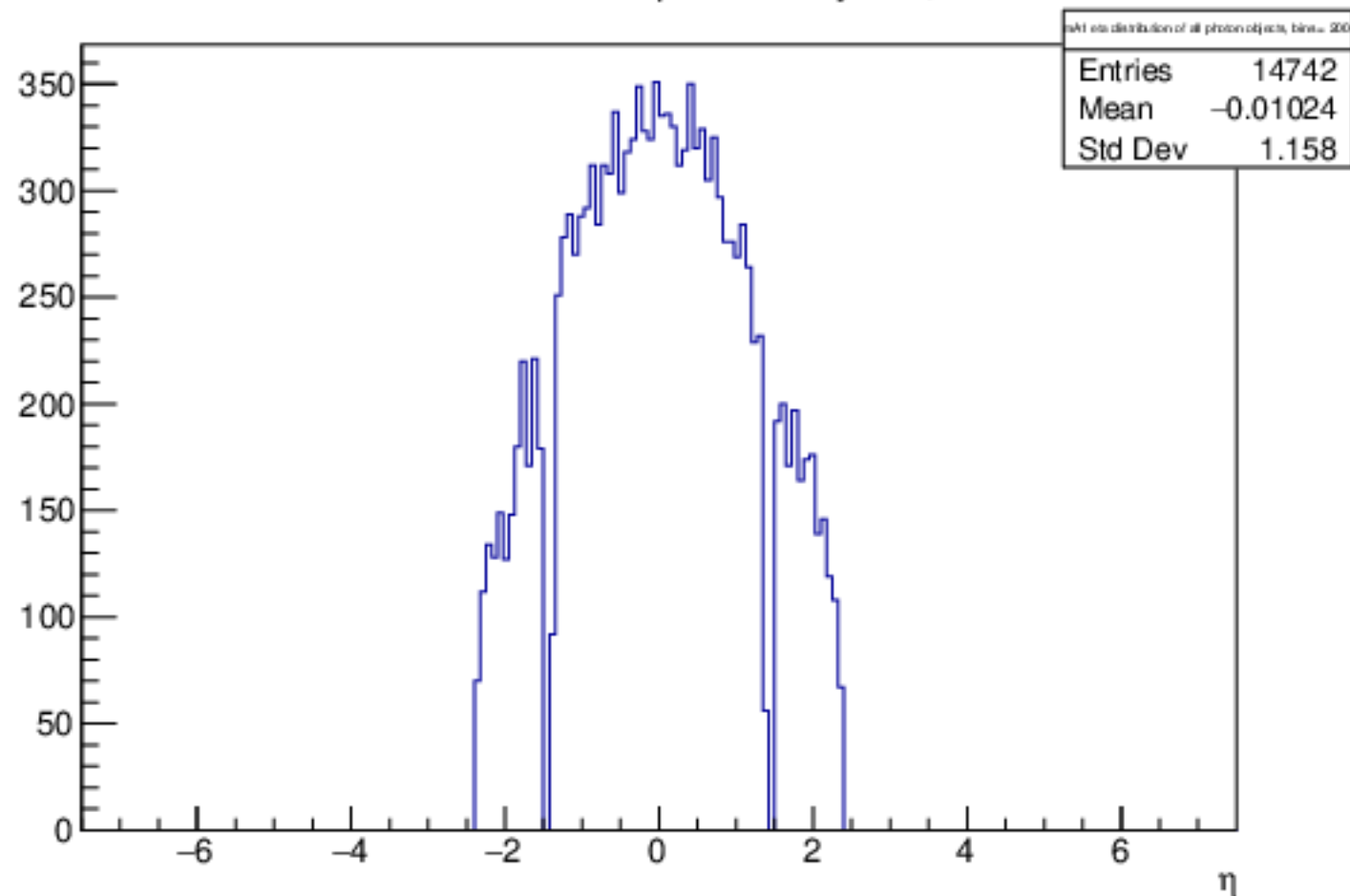
mA1 eta distribution of all electron objects after all dilep cuts, bins = 200



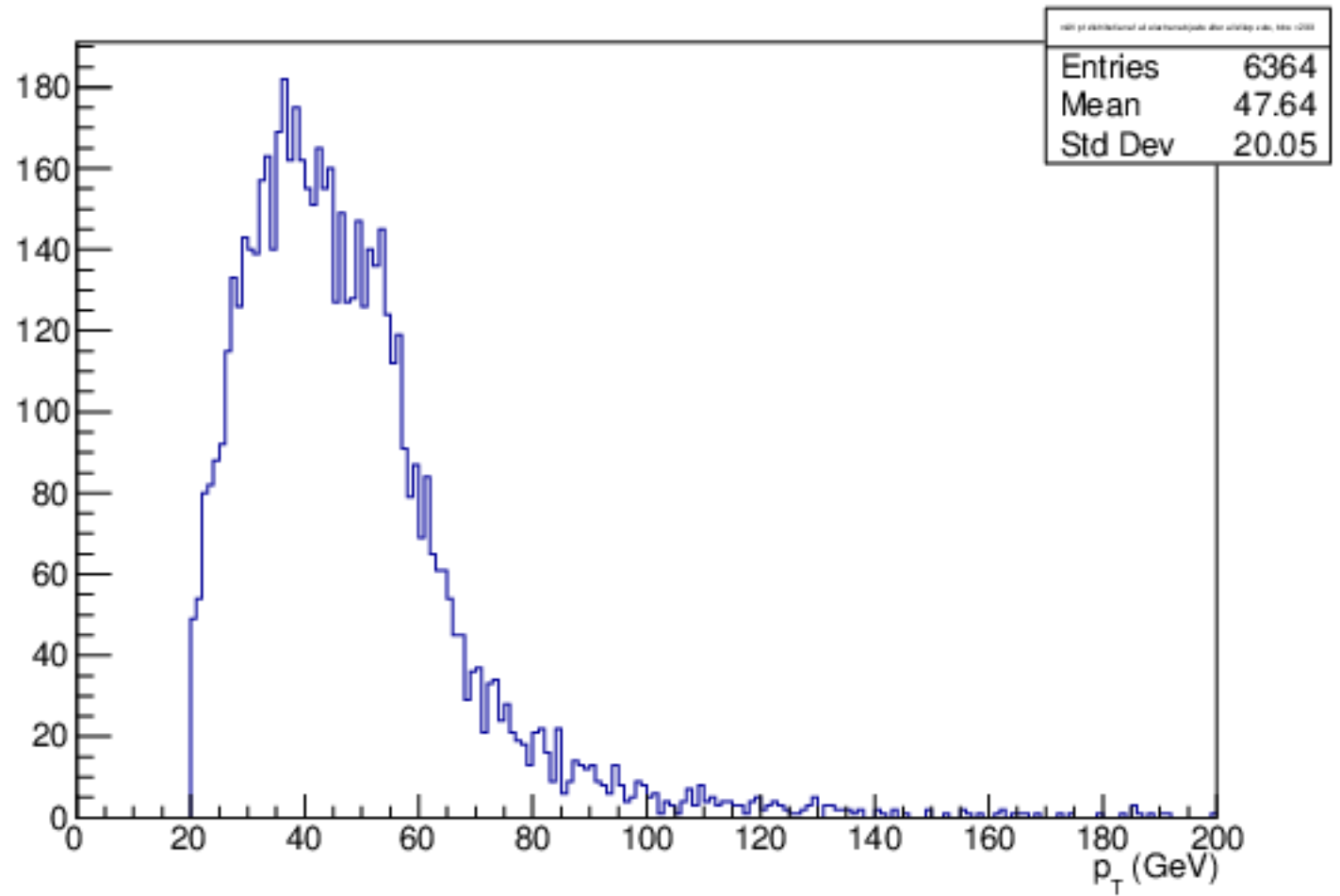
mA1 eta distribution of all electron objects, bins = 200



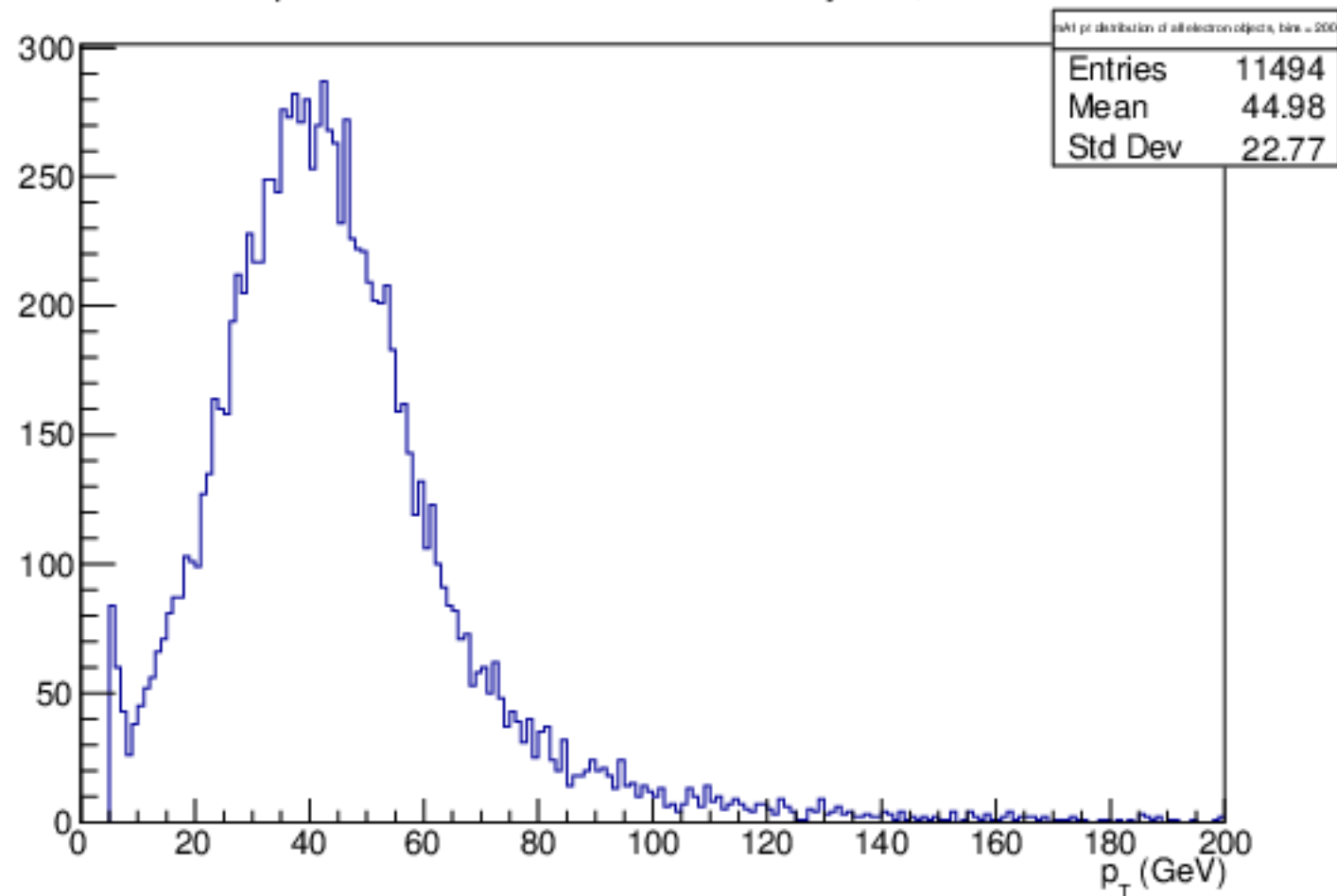
mA1 eta distribution of all photon objects, bins = 200



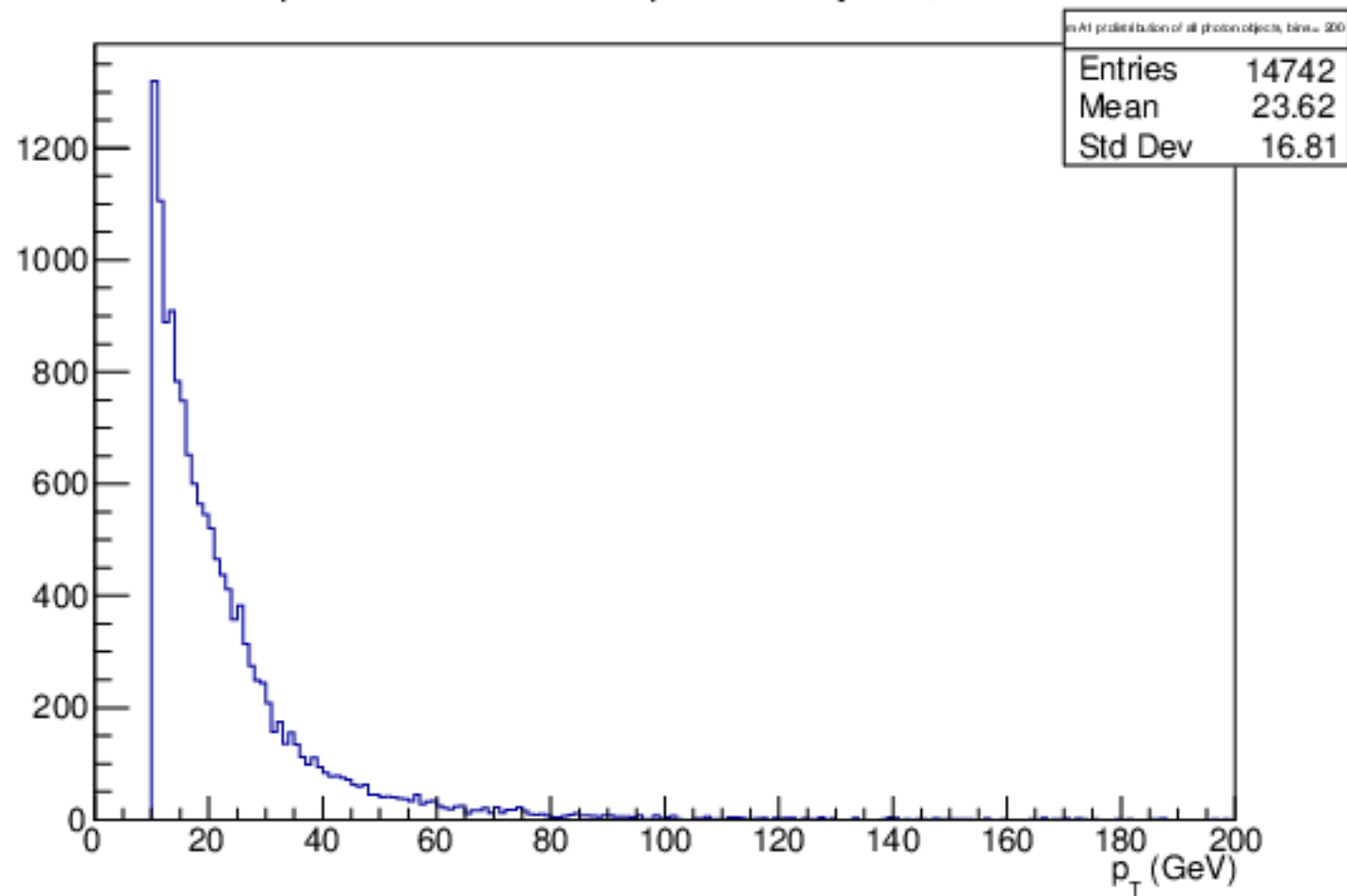
mA1 pt distribution of all electron objects after all dilep cuts, bins = 200



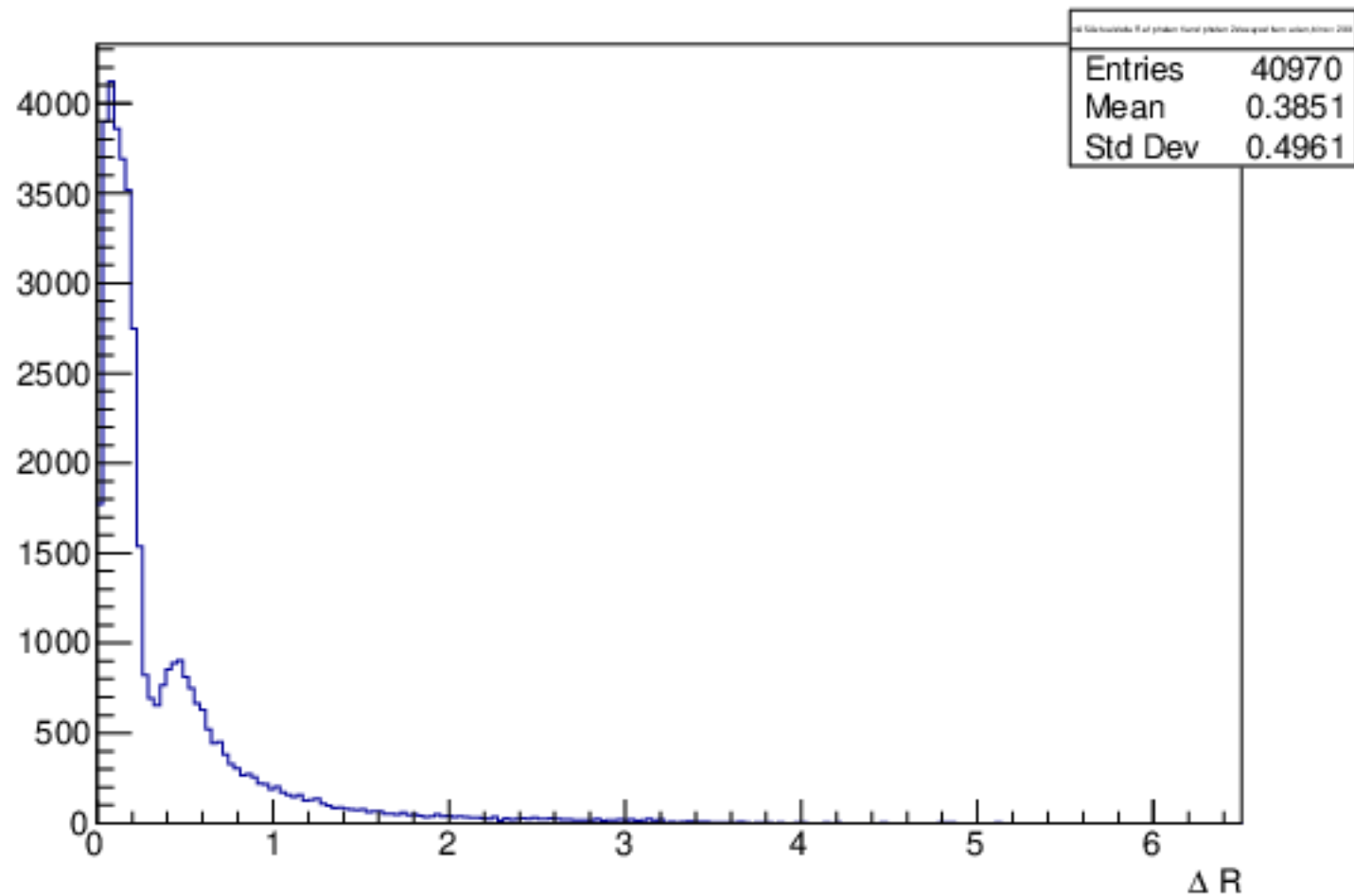
mA1 pt distribution of all electron objects, bins = 200



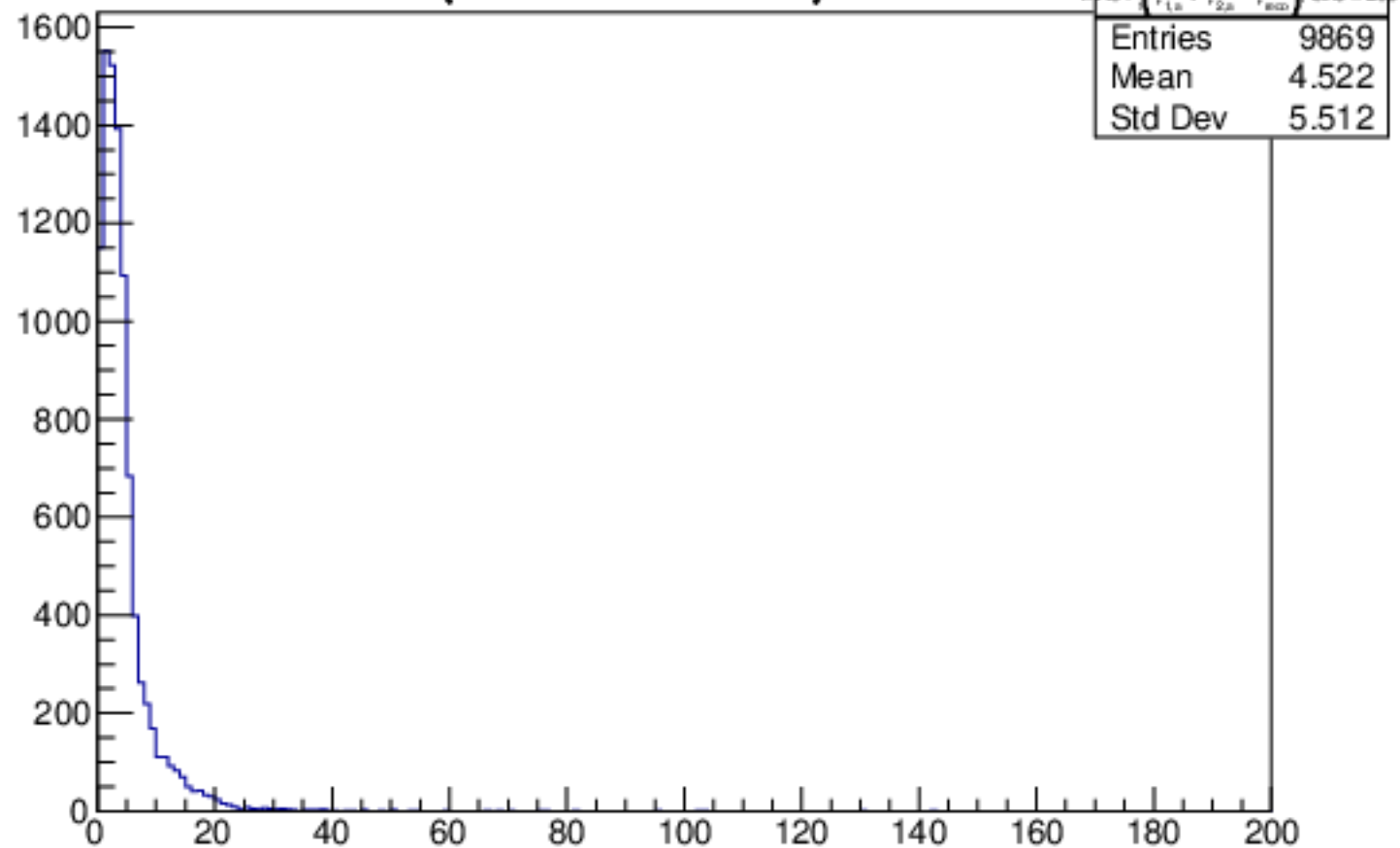
mA1 pt distribution of all photon objects, bins = 200



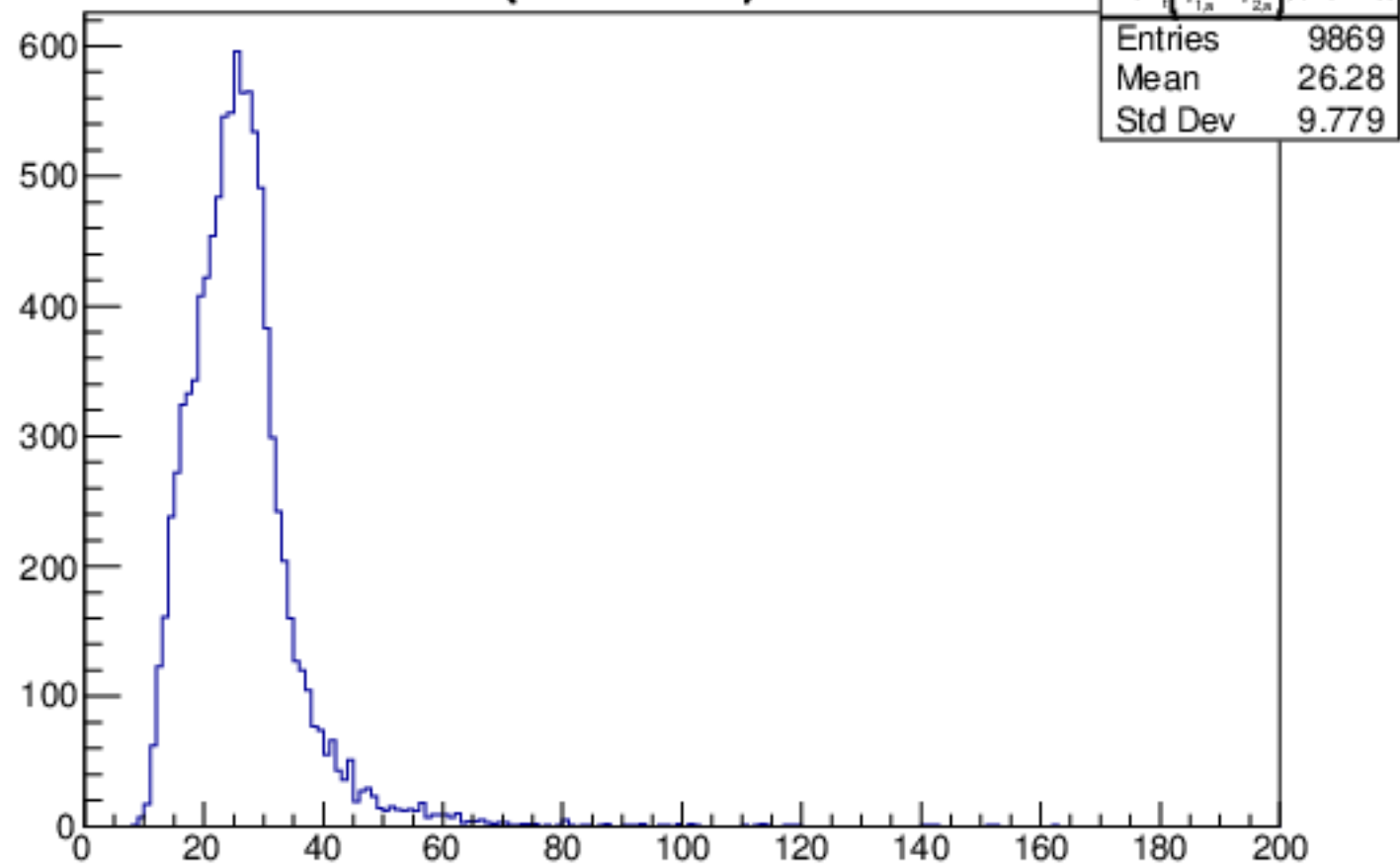
mA5 Actual delta R of photon 1 and photon 2 decayed from axion, bins = 200



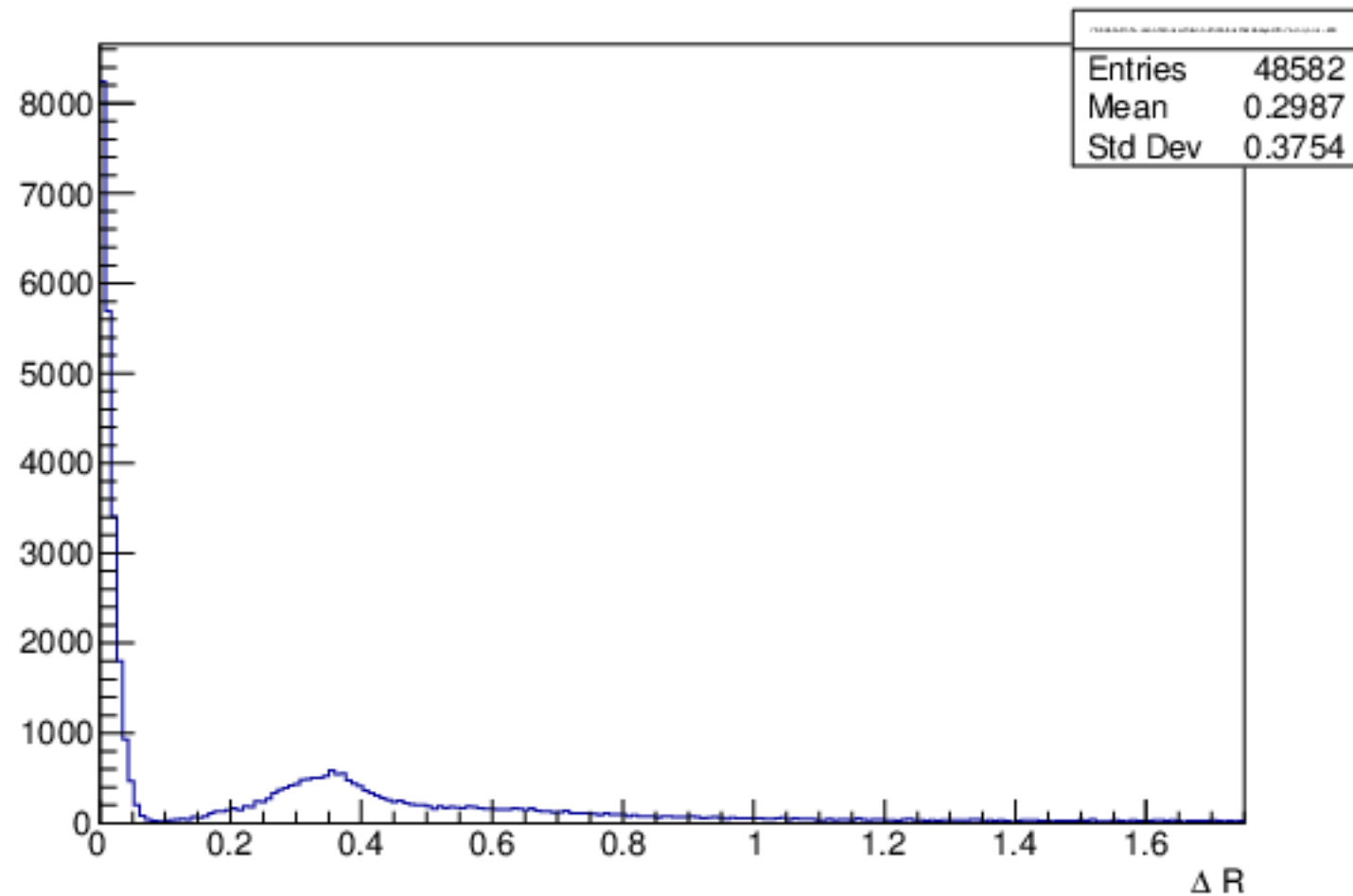
mA5 $P_t(\gamma_{1,a}^t + \gamma_{2,a}^t - \gamma_{\text{reco}})$, bins = 200



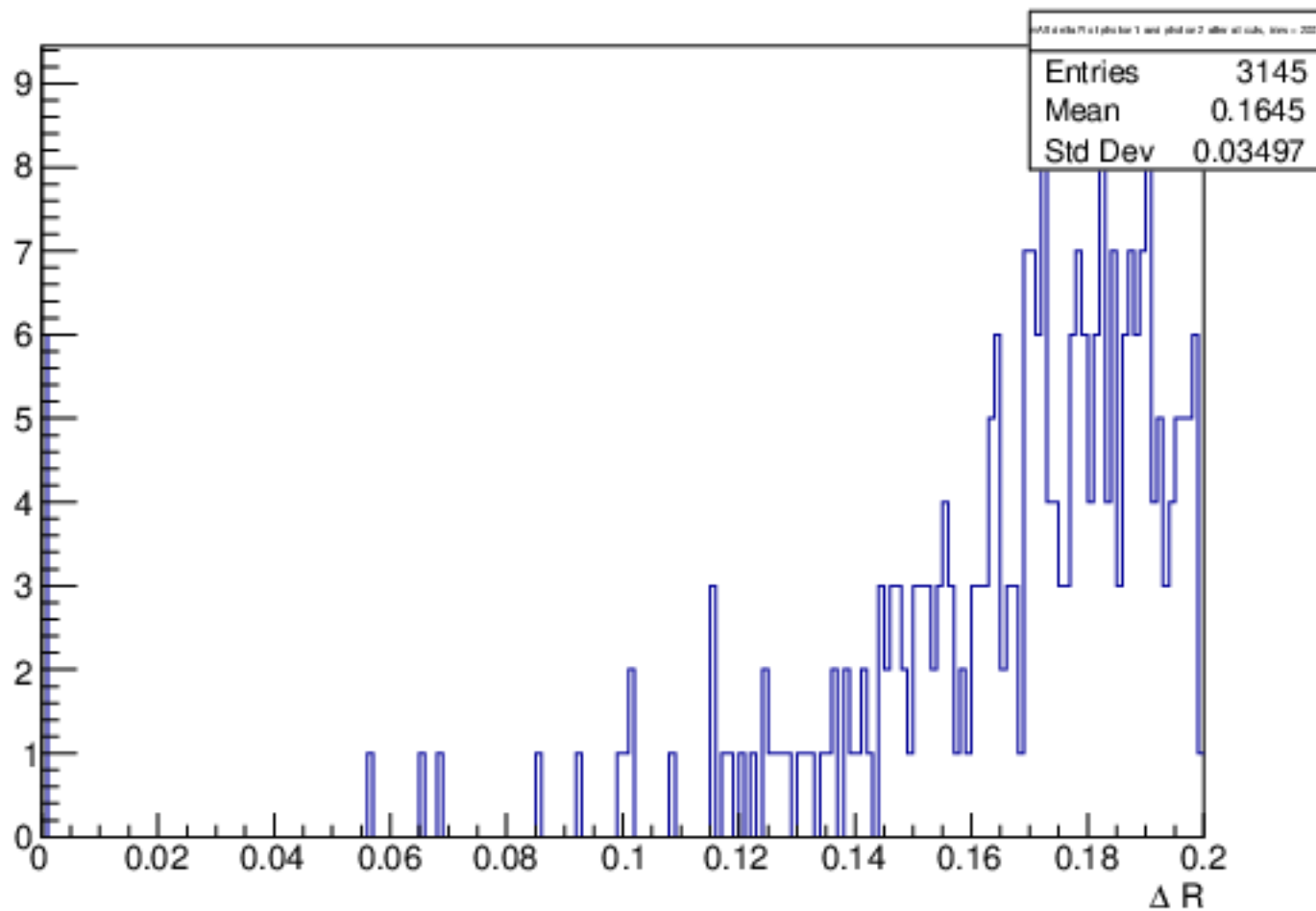
mA5 $P_t(\gamma_{1,a}^t + \gamma_{2,a}^t)$, bins = 200



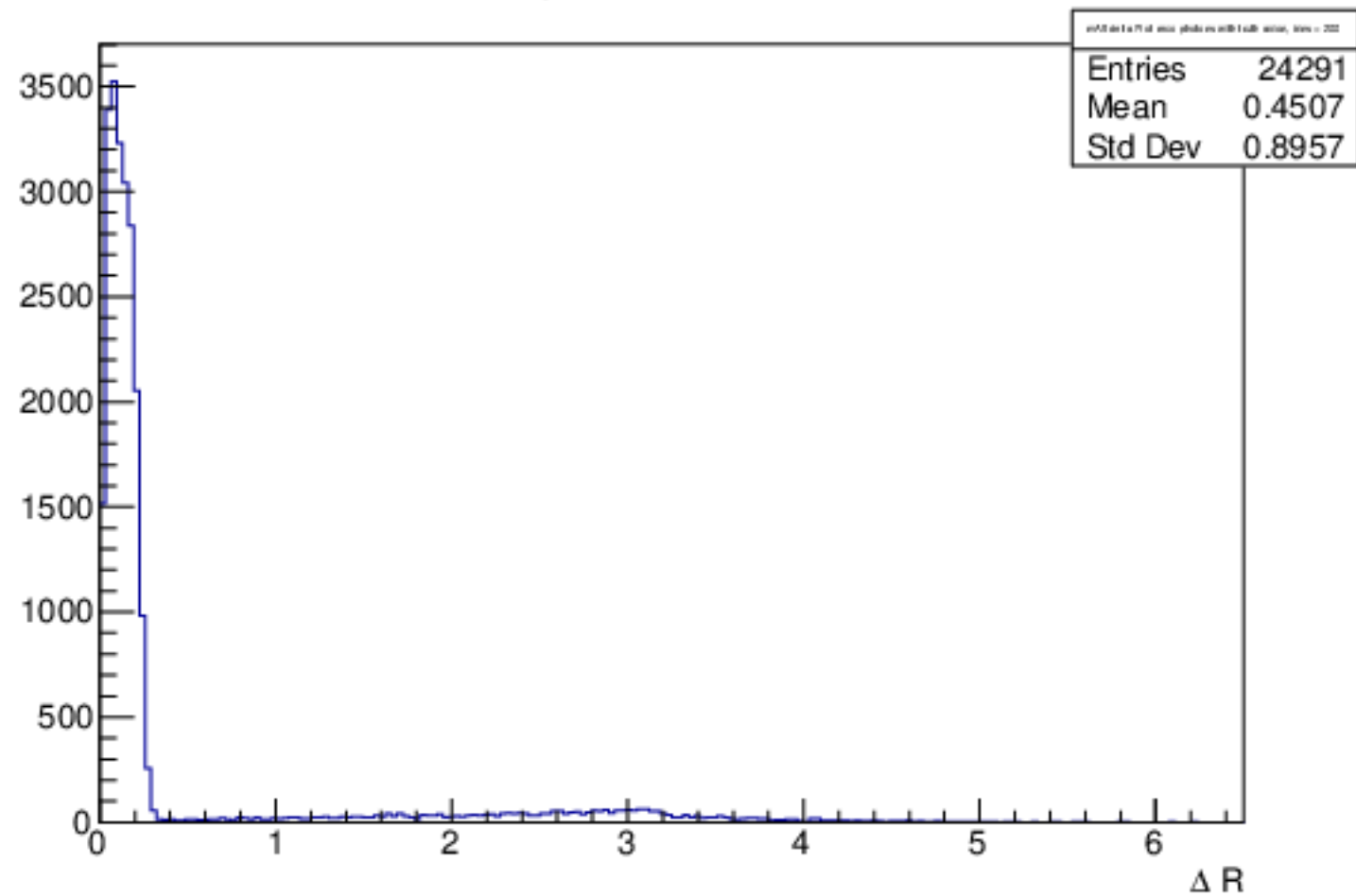
mA5 delta R of all reco photons with two truth photons that decayed from axion, bins = 200



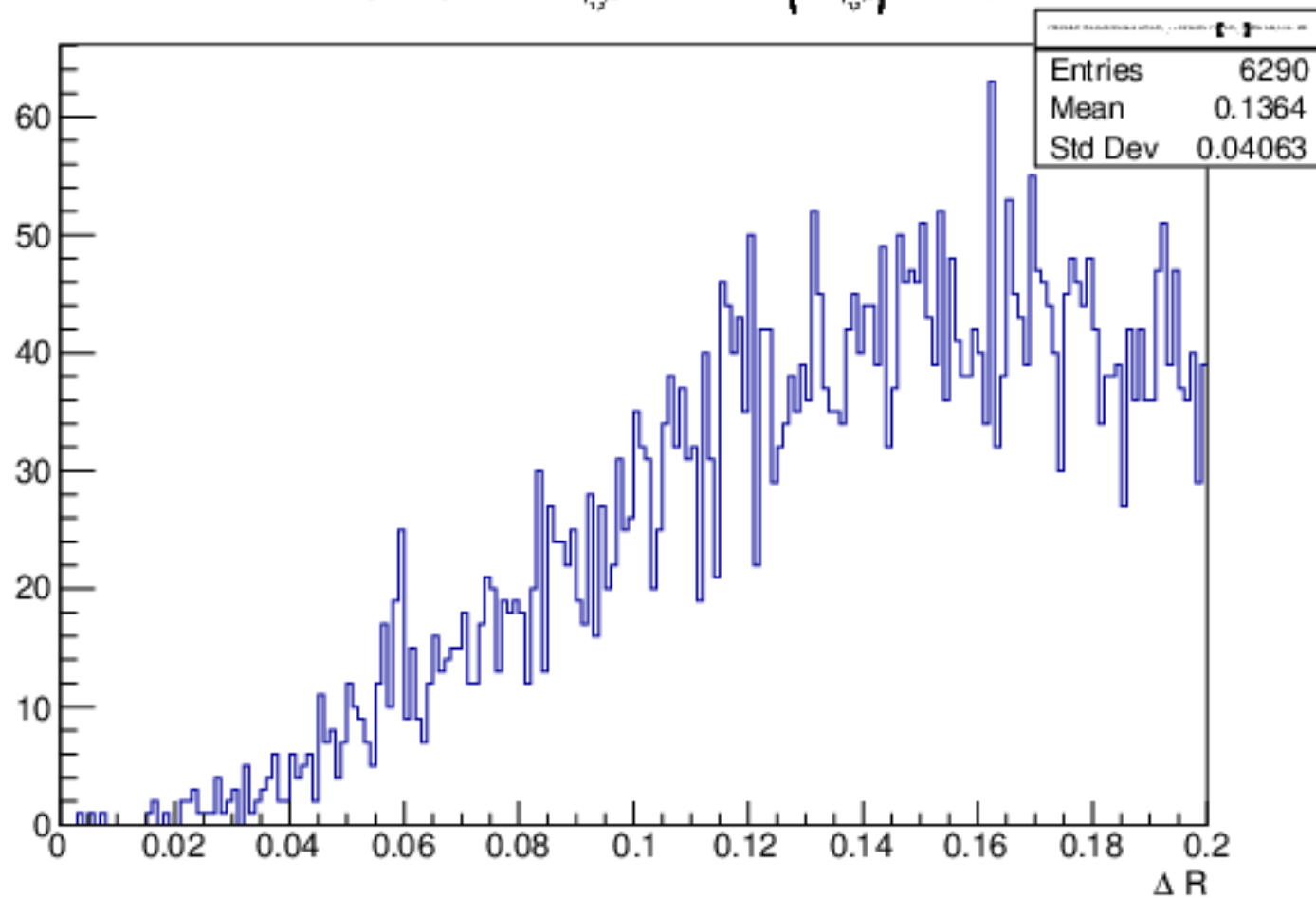
mA5 delta R of photon 1 and photon 2 after all cuts, bins = 200



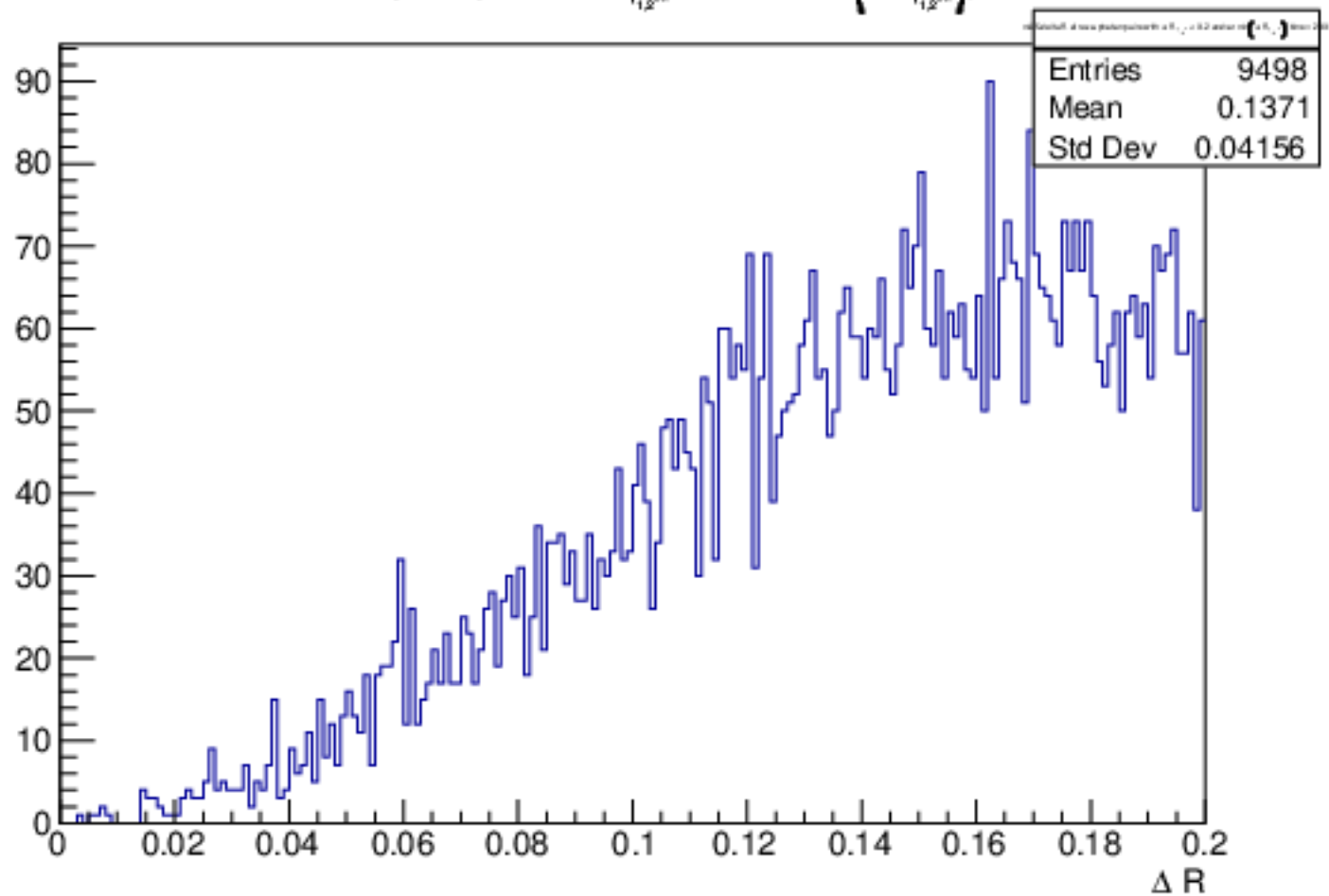
mA5 delta R of reco photons with truth axion, bins = 200



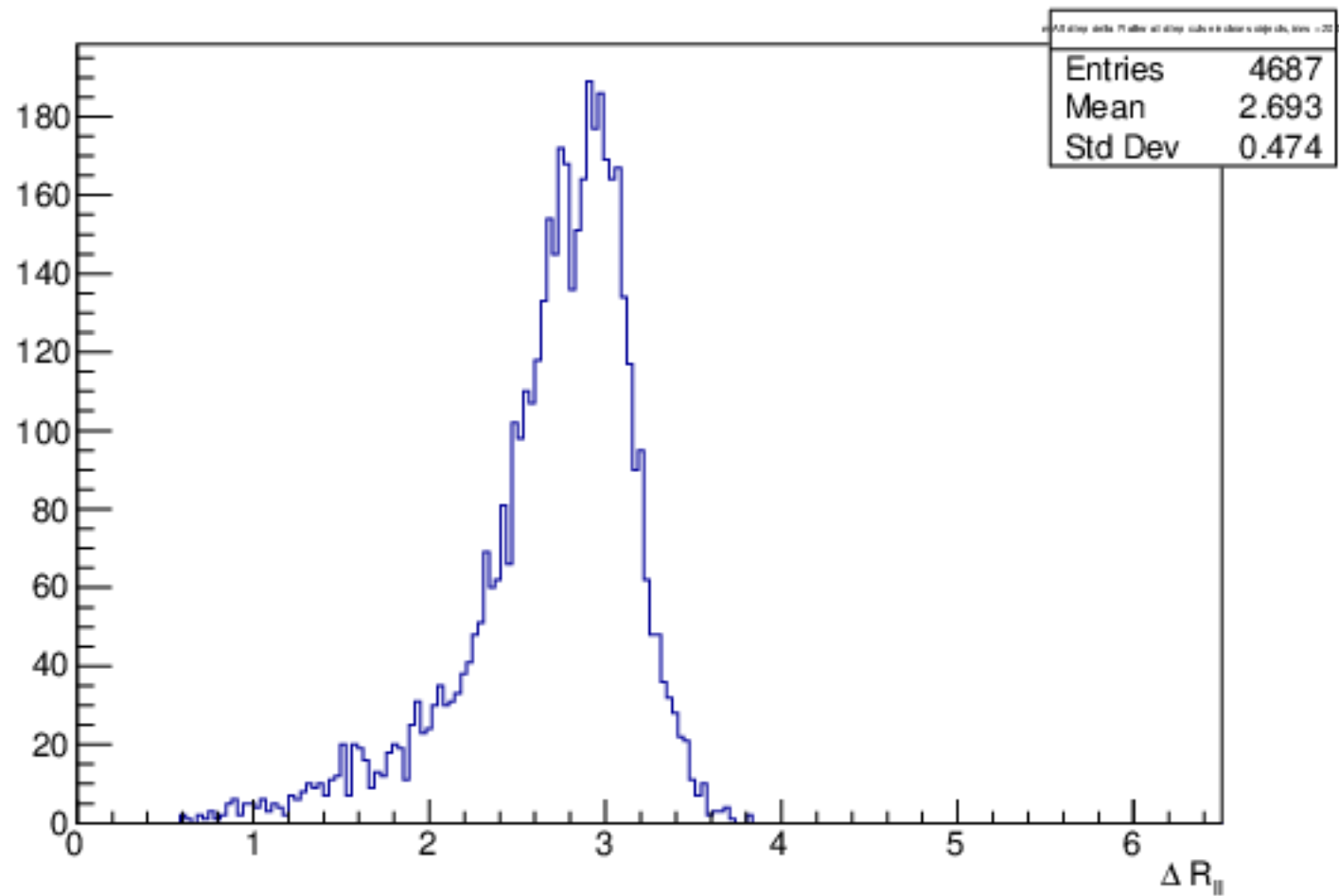
mA5 delta R of reco-photon pairs with $\Delta R_{\gamma,\gamma^*} < 0.2$ and/or $\min\{\Delta R_{\gamma,\gamma^*}\}$ after cuts, bins = 200



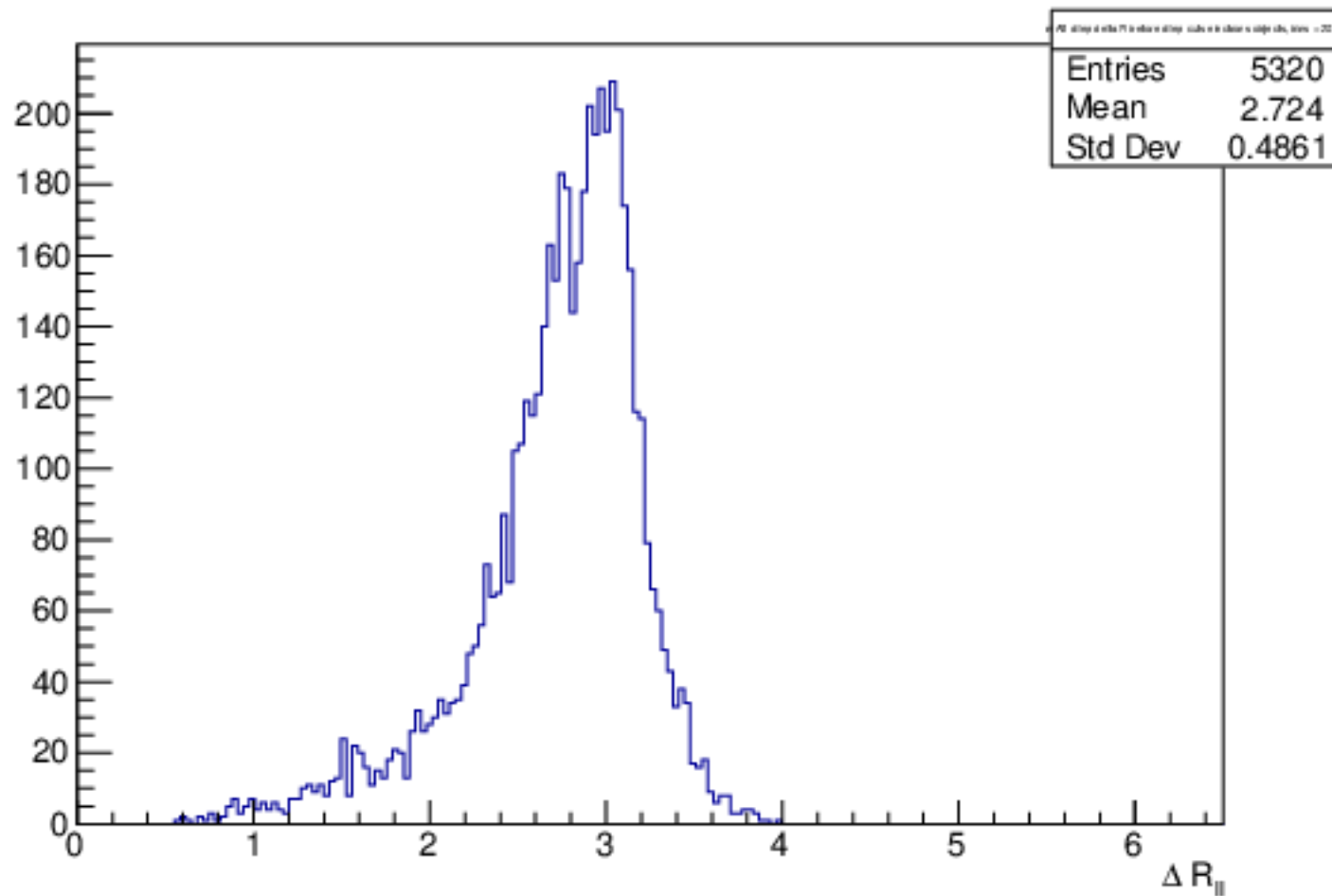
mA5 delta R of reco-photon pairs with $\Delta R_{\gamma_{1,2}^{\text{reco}}} < 0.2$ and/or $\min(\Delta R_{\gamma_{1,2}^{\text{reco}}})$, bins = 200



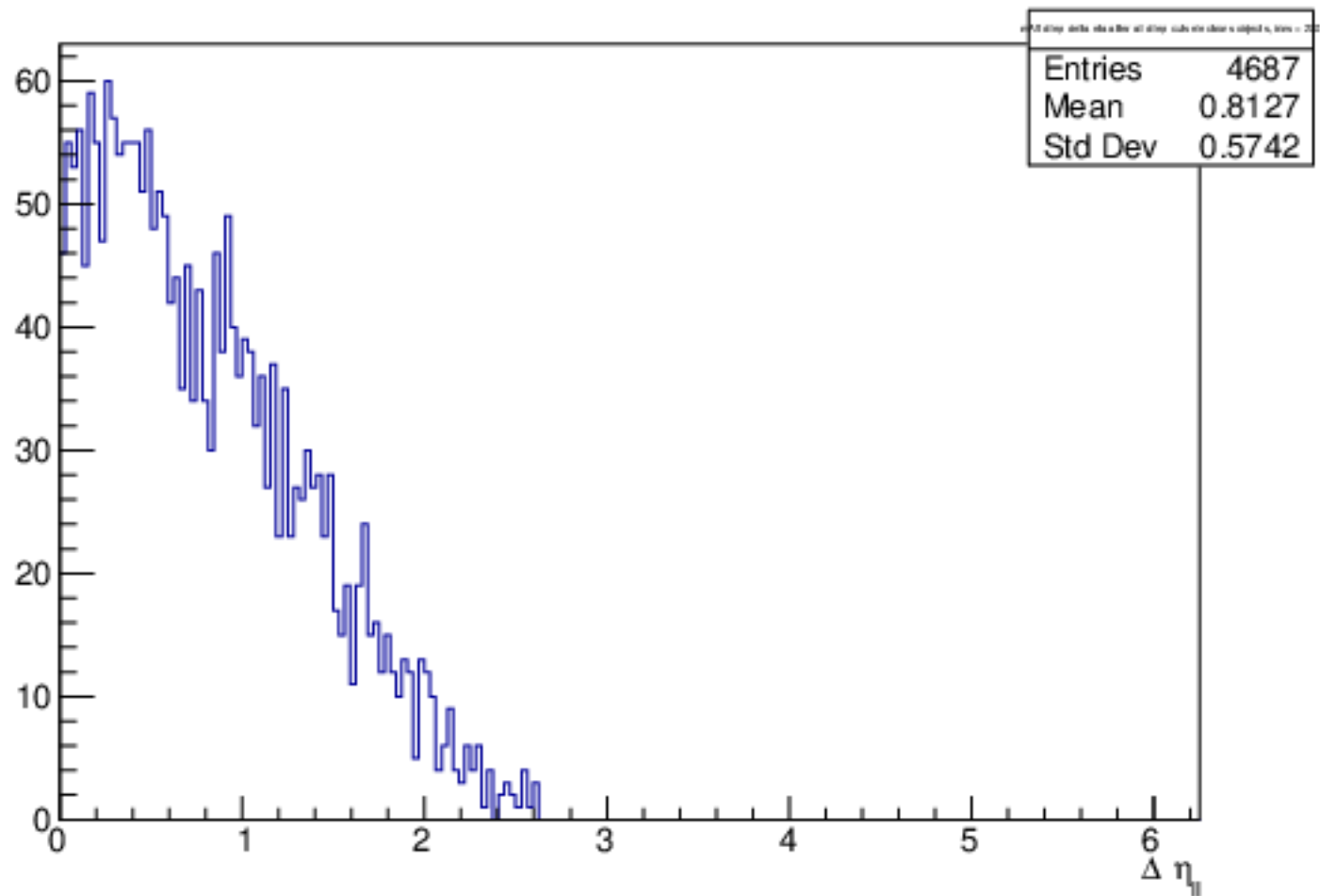
mA5 dilep delta R after all dilep cuts electrons objects, bins = 200



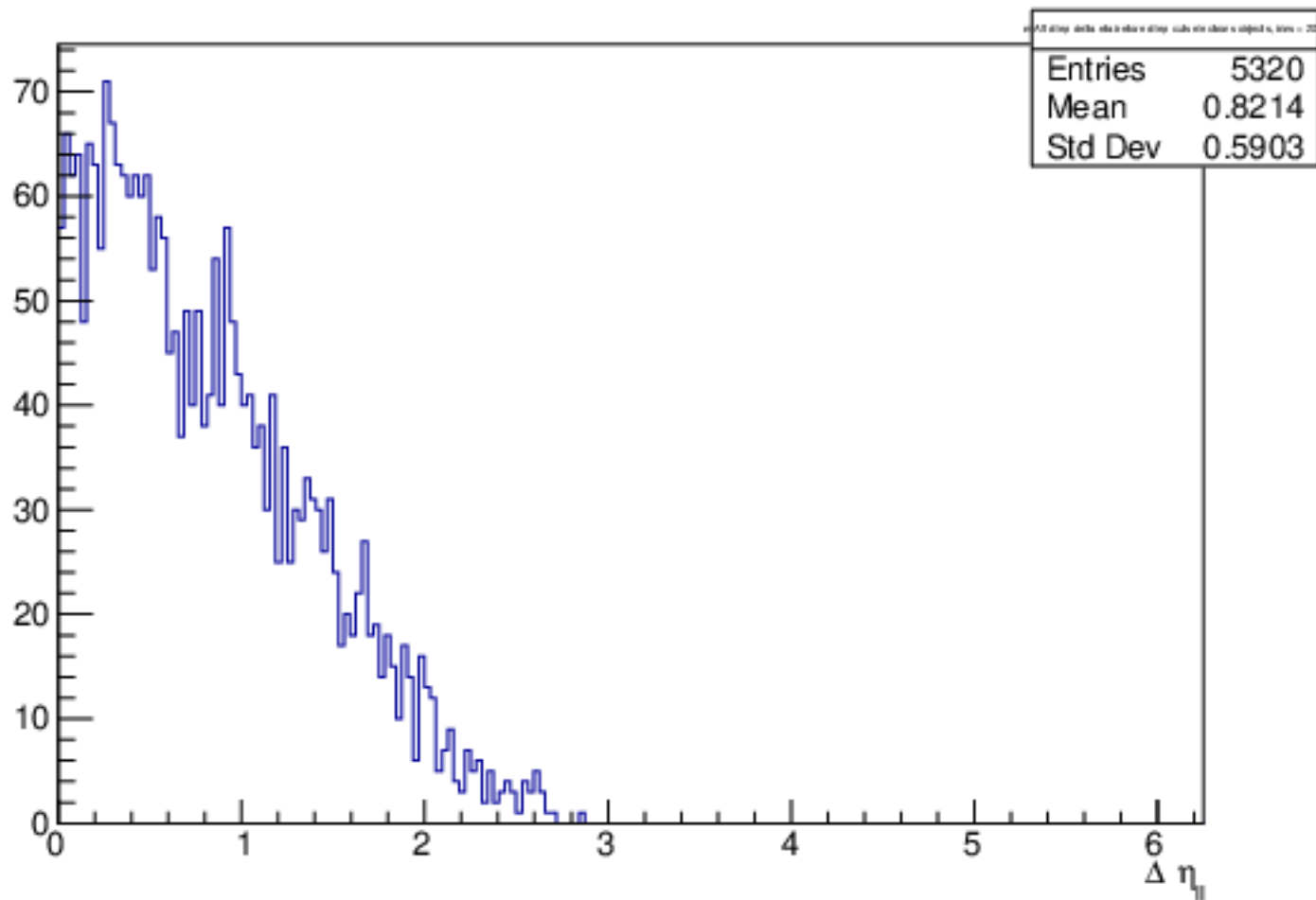
mA5 dilep delta R before dilep cuts electrons objects, bins = 200



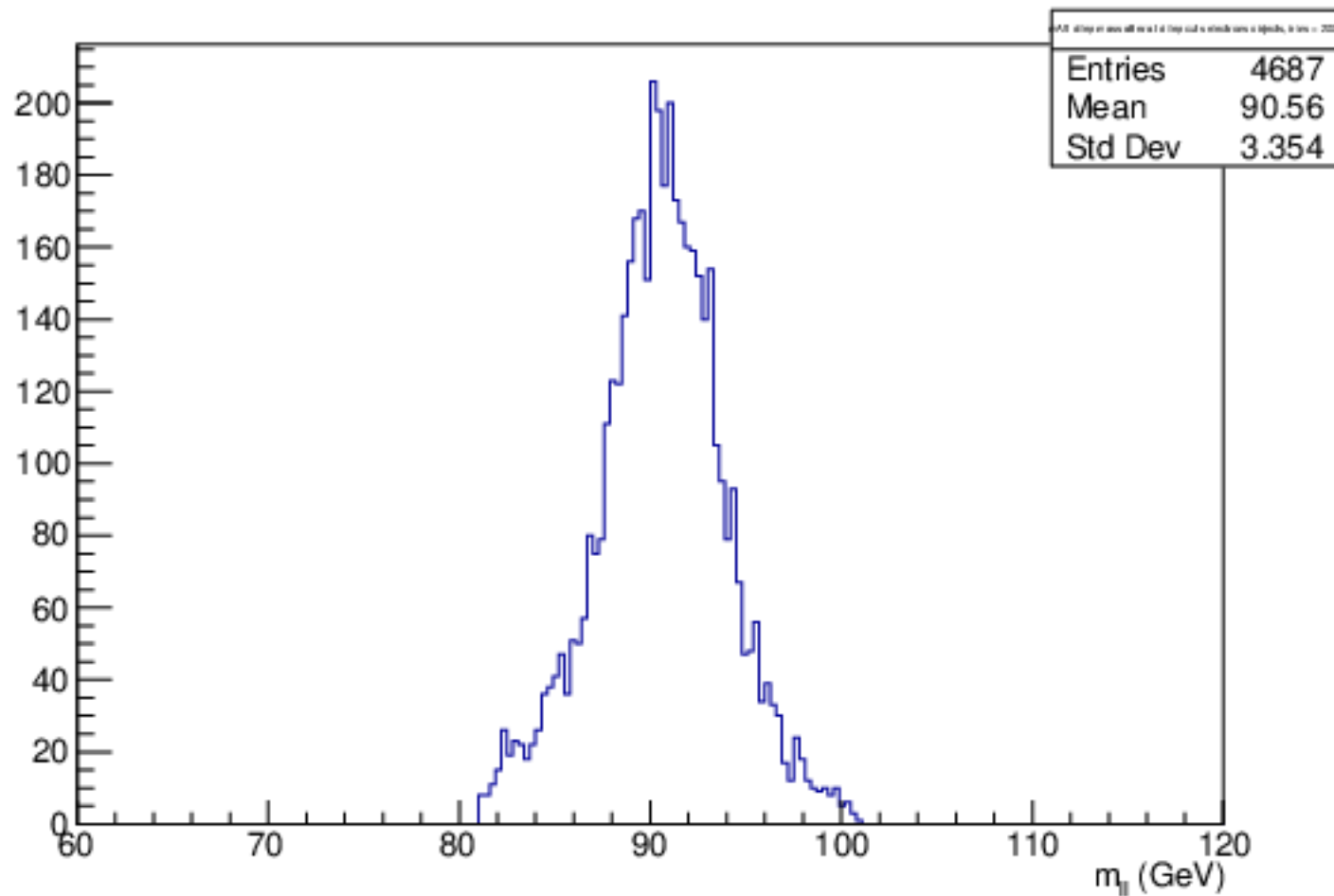
mA5 dilep delta eta after all dilep cuts electrons objects, bins = 200



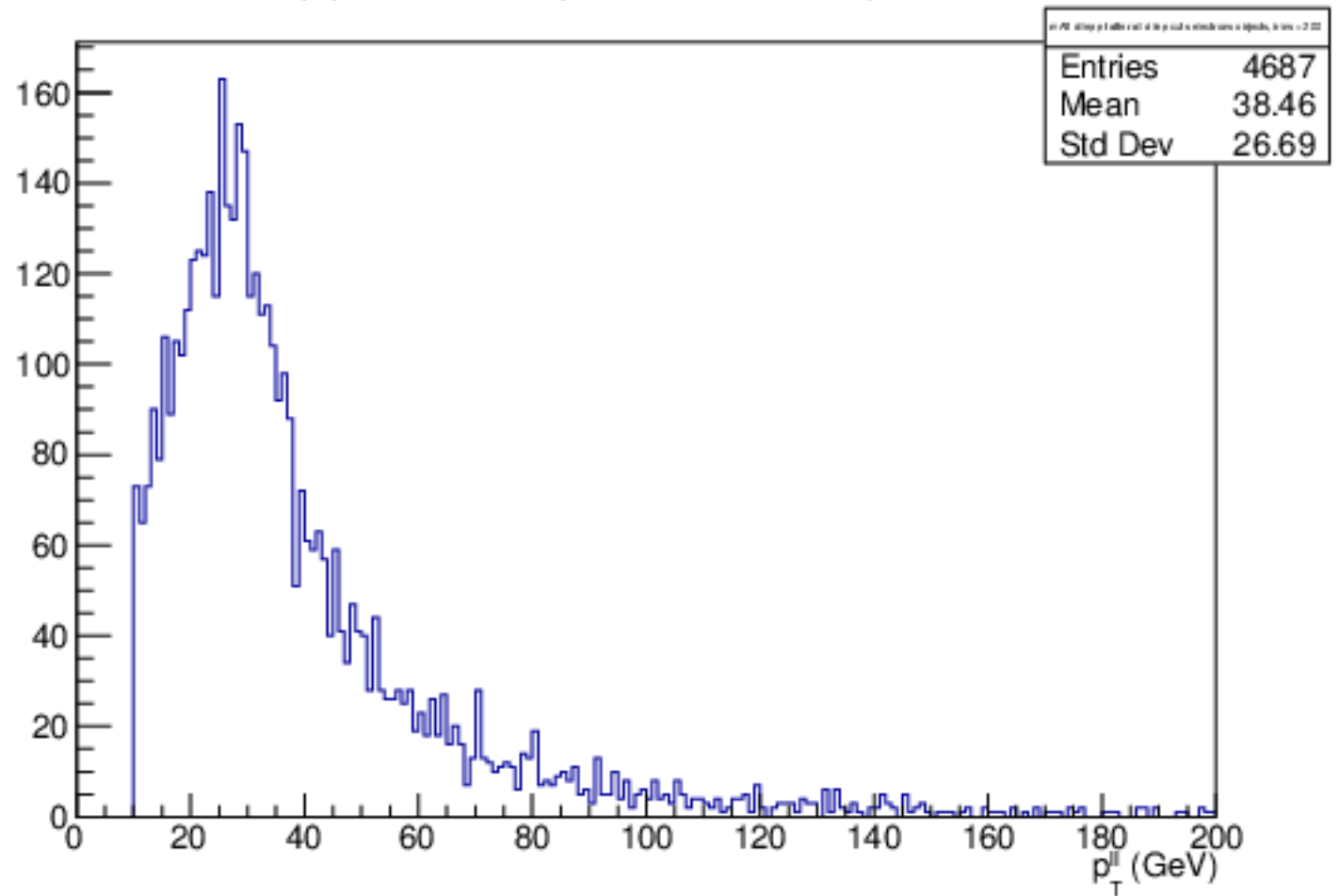
mA5 dilep delta eta before dilep cuts electrons objects, bins = 200



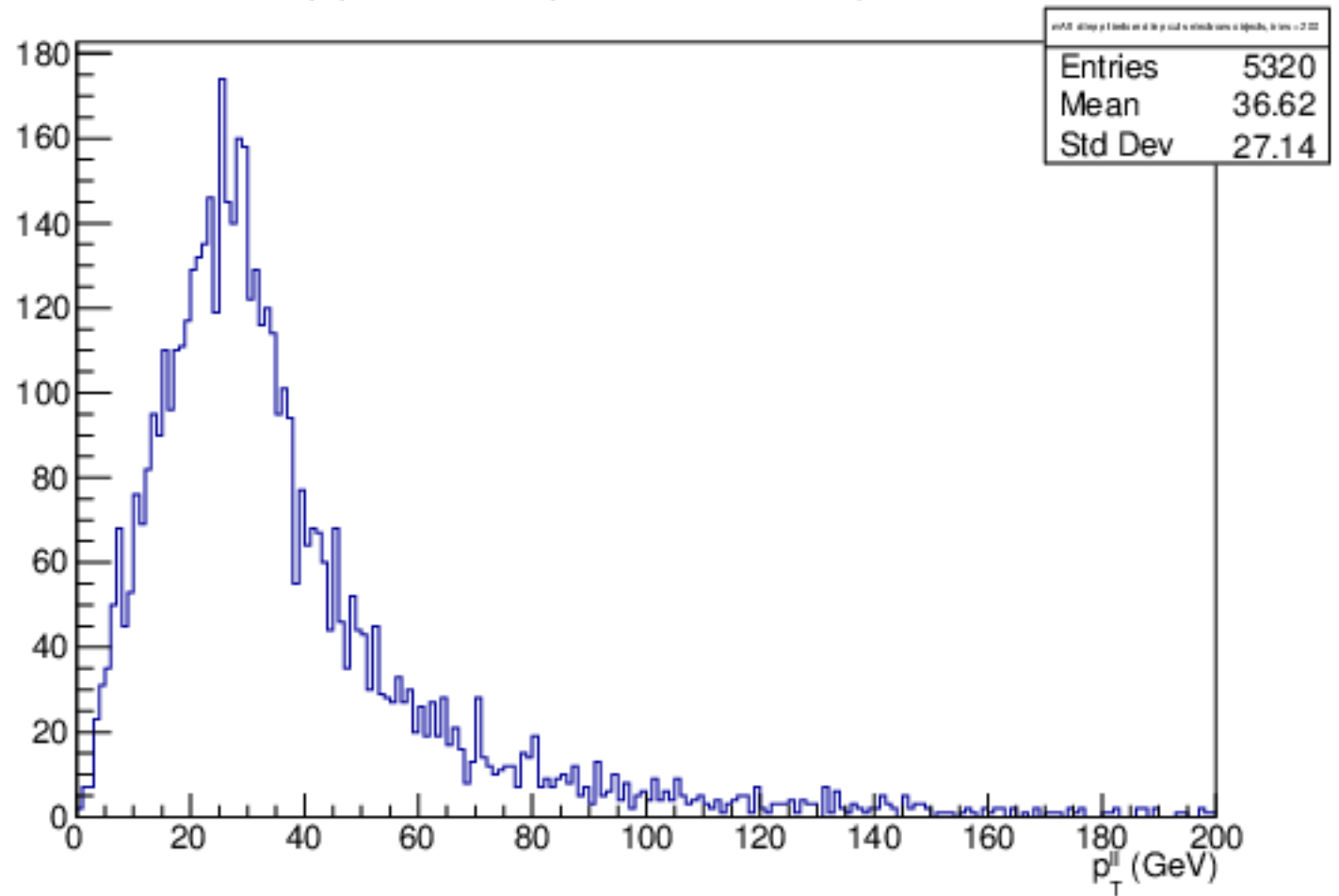
mA5 dilep mass after all dilep cuts electrons objects, bins = 200



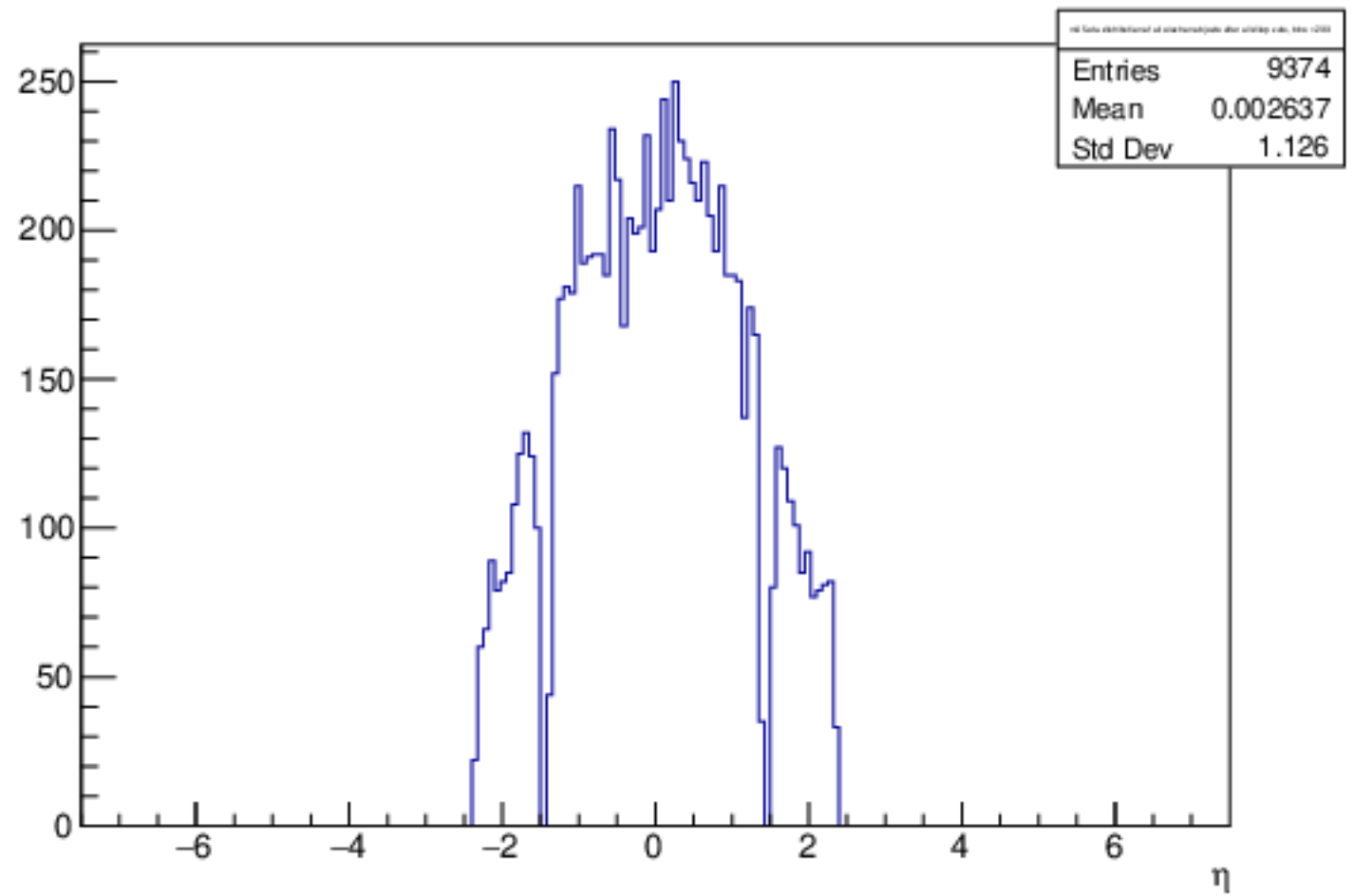
mA5 dilep pt after all dilep cuts electrons objects, bins = 200



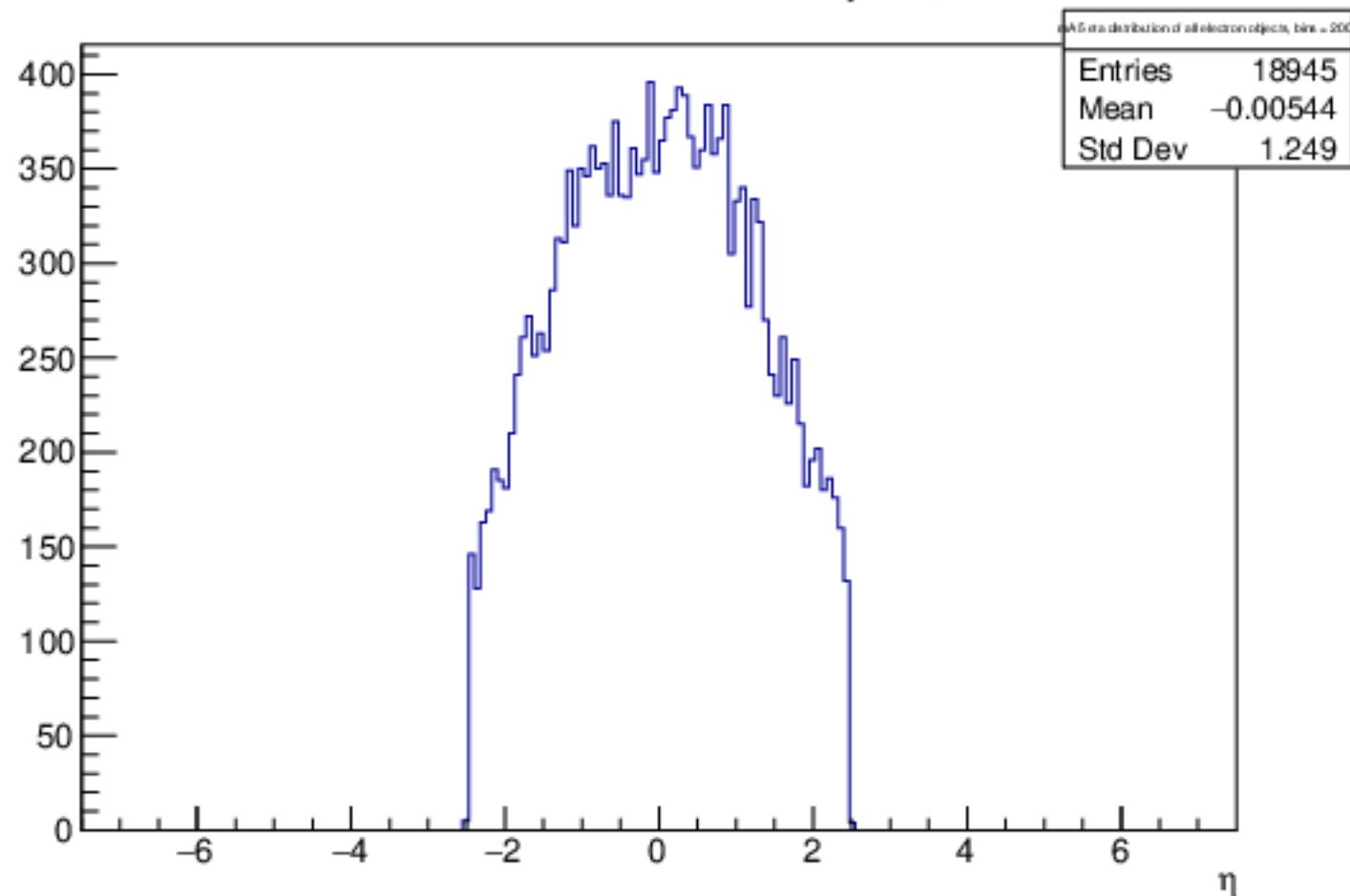
mA5 dilep pt before dilep cuts electrons objects, bins = 200



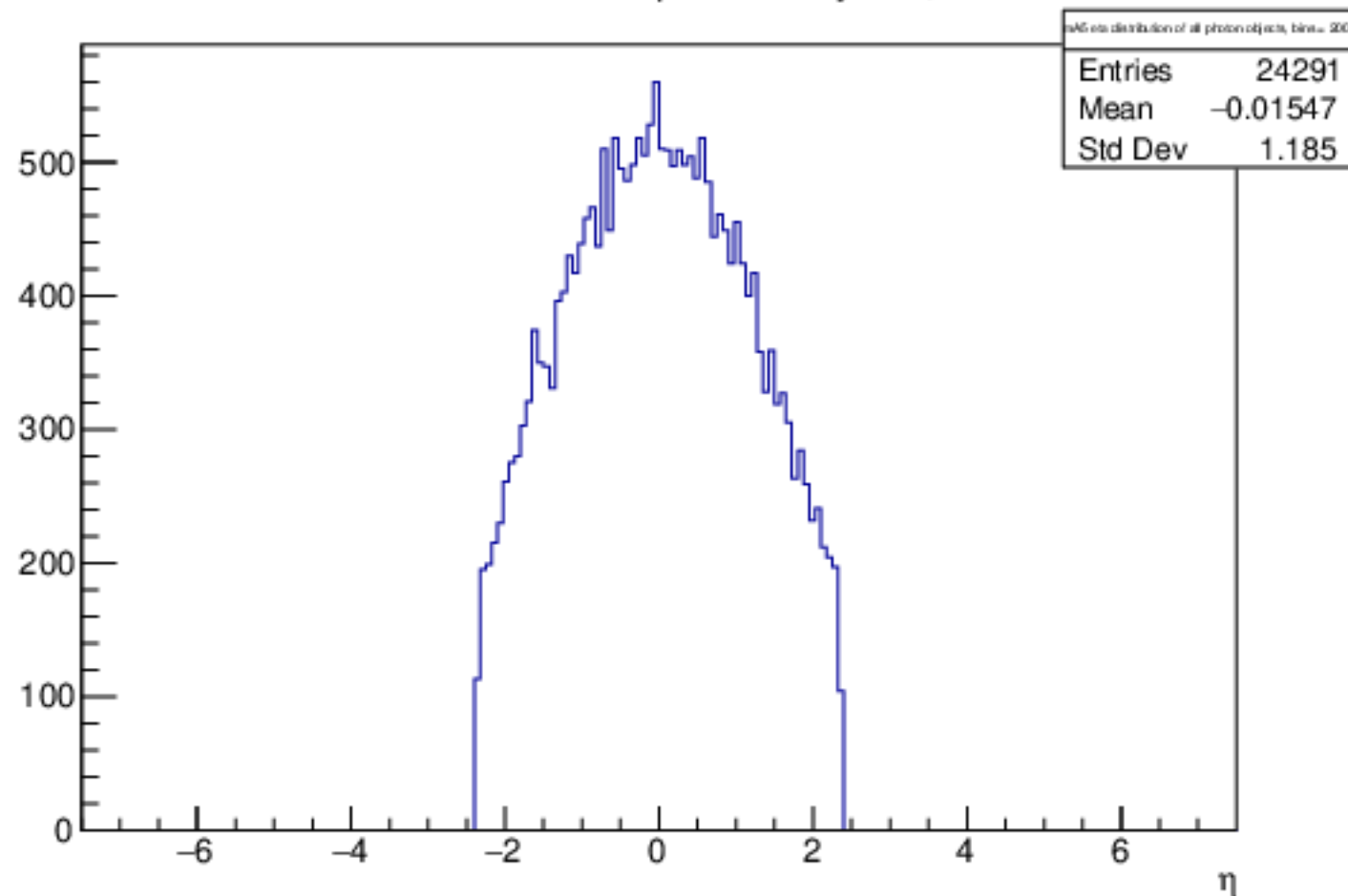
mA5 eta distribution of all electron objects after all dilep cuts, bins = 200



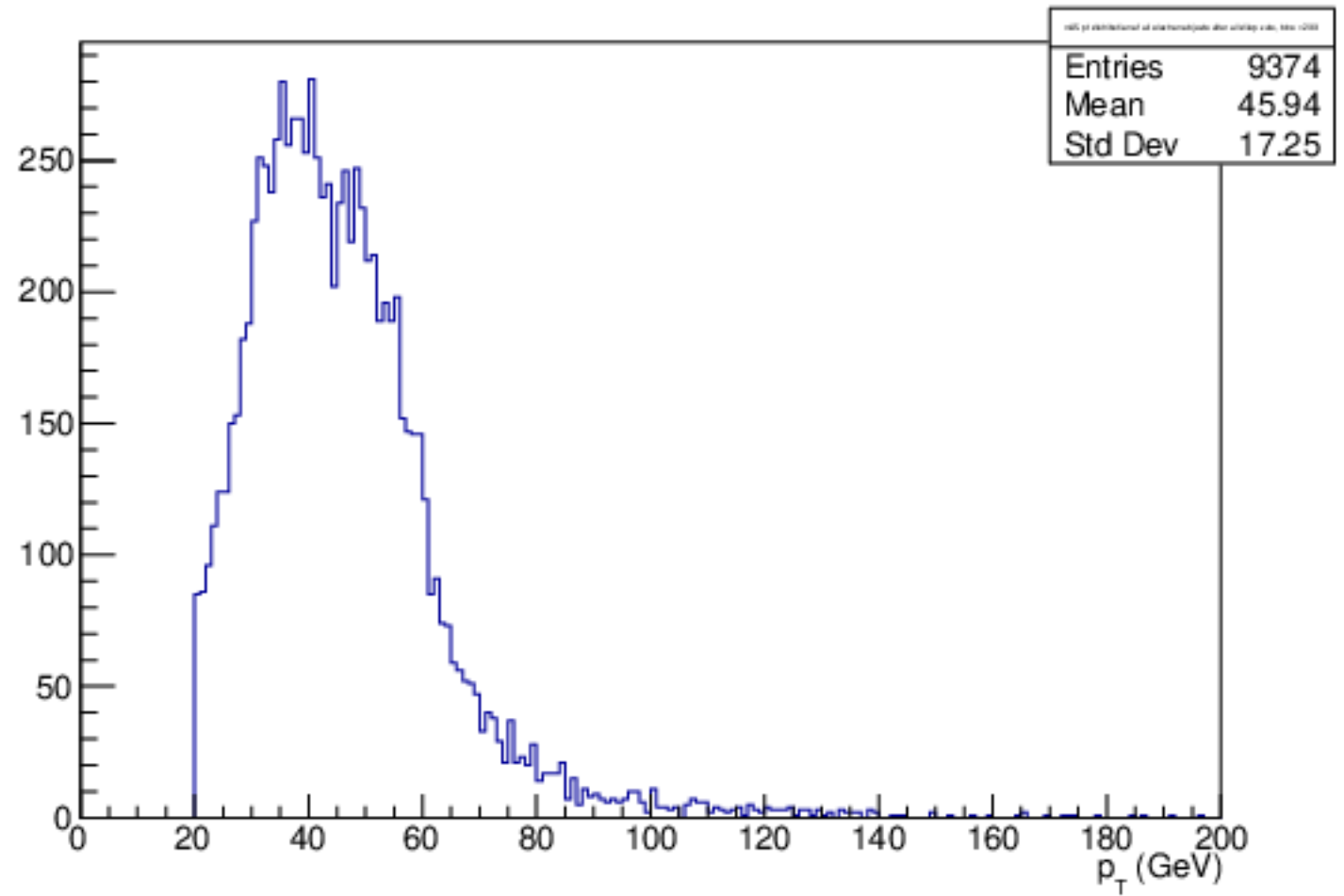
mA5 eta distribution of all electron objects, bins = 200



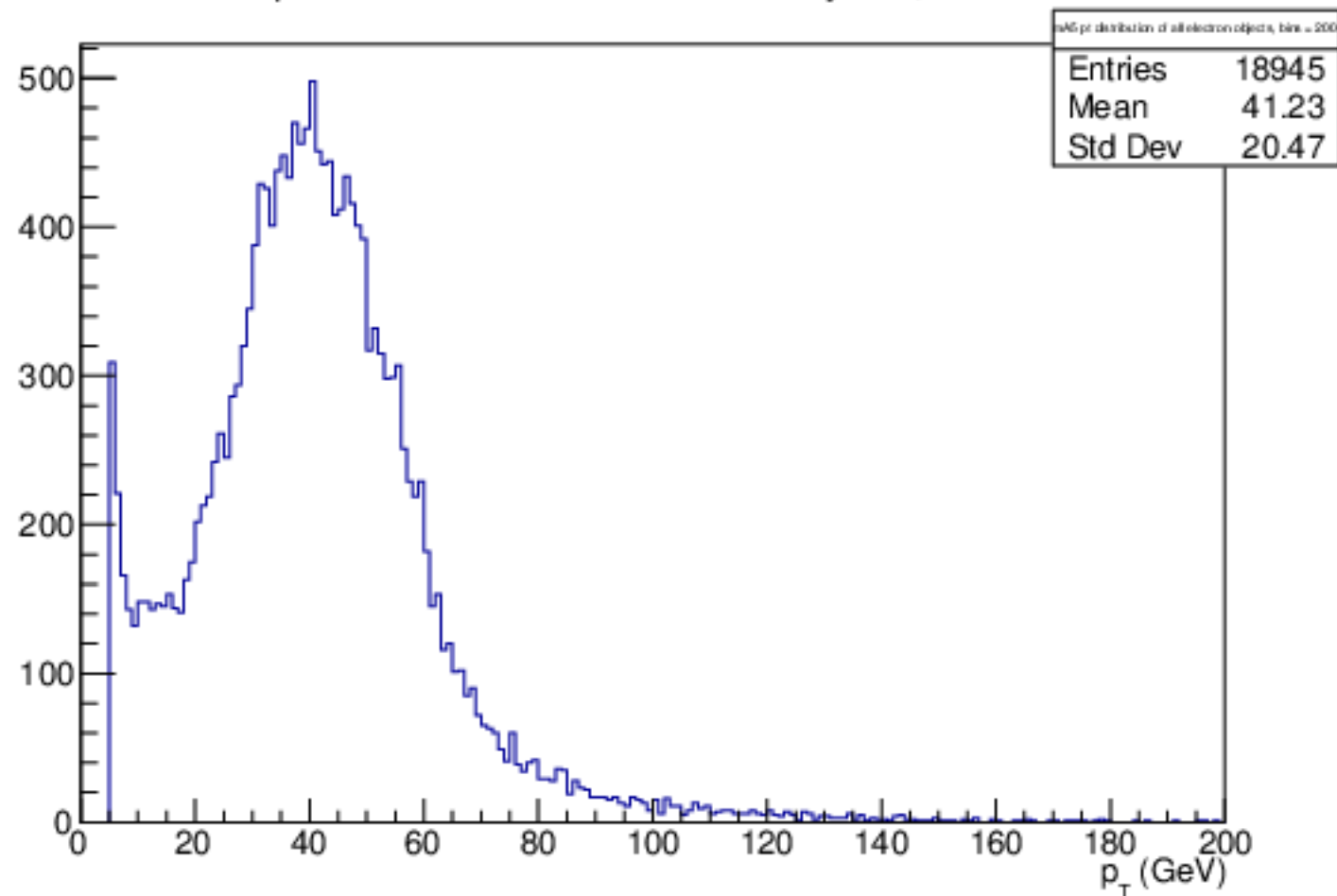
mA5 eta distribution of all photon objects, bins = 200



mA5 pt distribution of all electron objects after all dilep cuts, bins = 200



mA5 pt distribution of all electron objects, bins = 200



mA5 pt distribution of all photon objects, bins = 200

