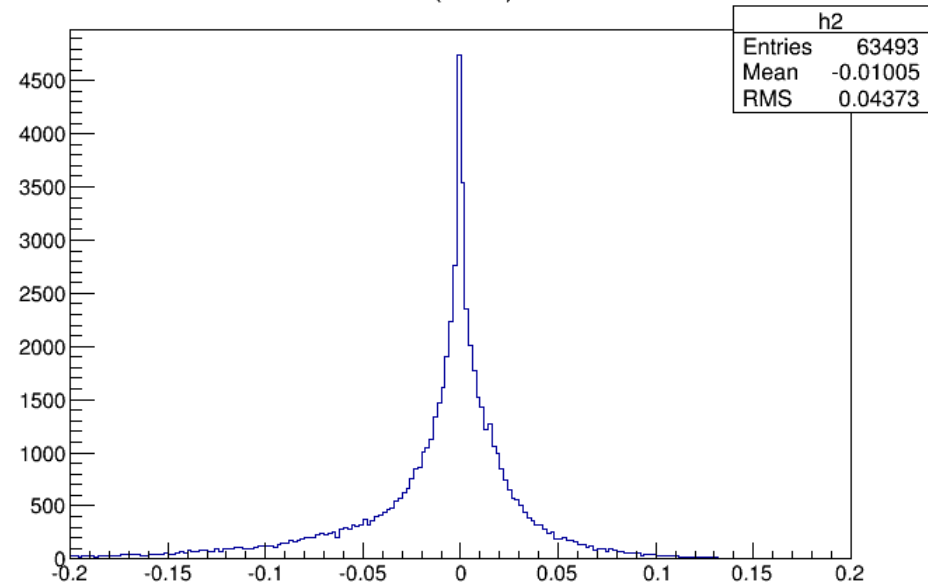
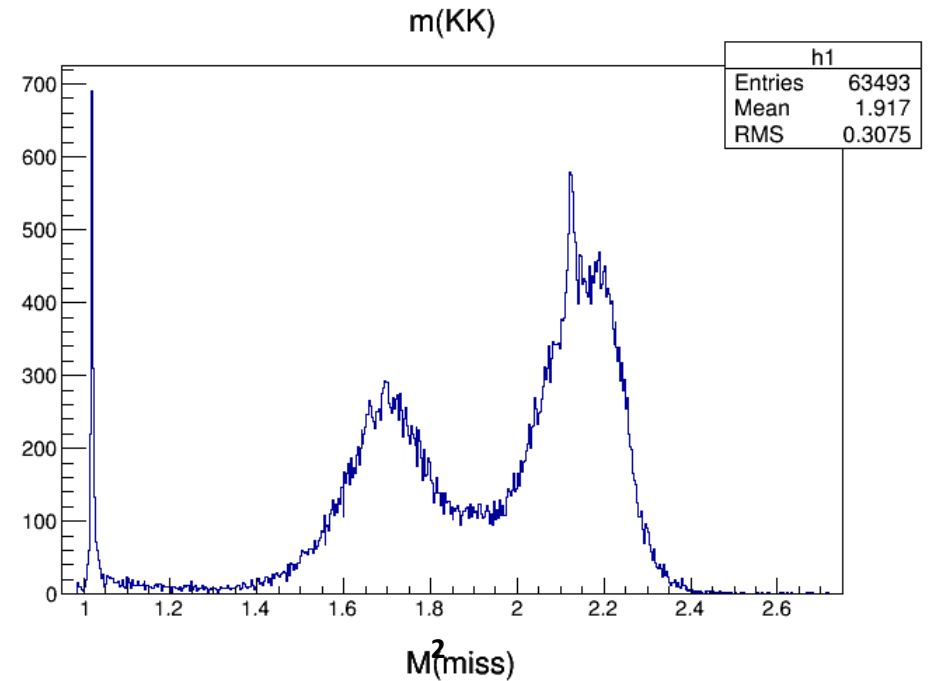


Study of $e^+ e^- \rightarrow \gamma K^+ K^-$

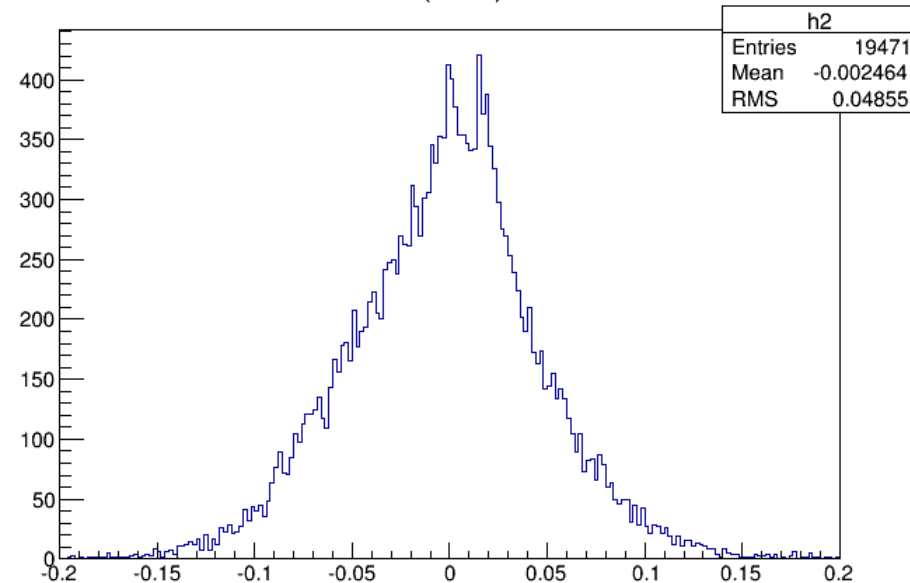
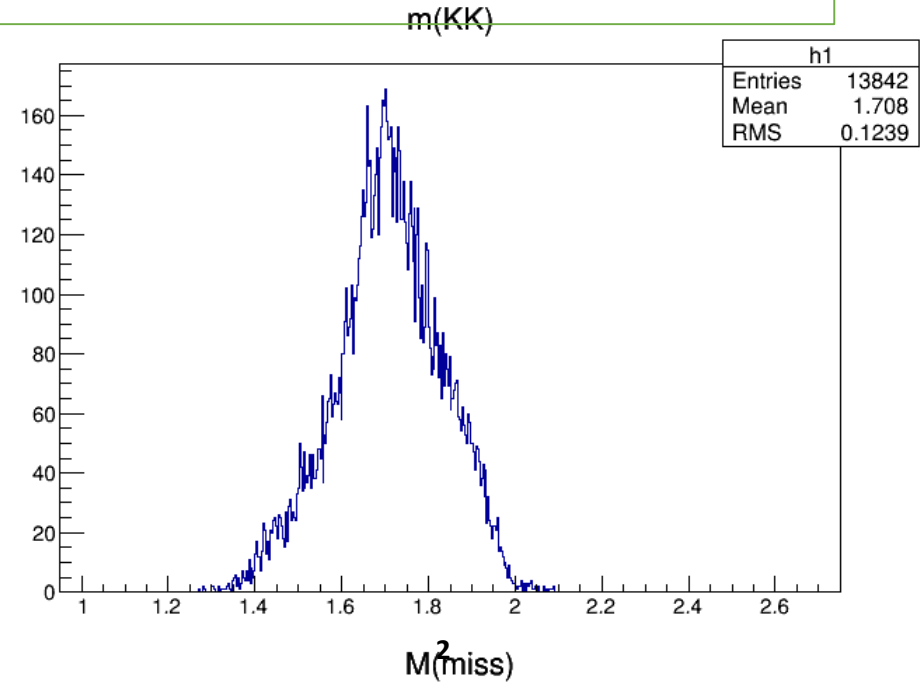
Event selection

- Good Charged Track:
 $|V_z| < 10.0 \ \&\& \ |V_r| < 1.0 \ \&\& \ |\cos\theta| \leq 0.93$;
- PID:
Kaon: $\text{prob}_K > \text{prob}_p \ \&\& \ \text{prob}_K > \text{prob}_\pi$;
 $N(K^+) = N(K^-) = 1$;
- Good Photon :
 $E_{\text{barrel}} > 25 \text{ MeV}$; $E_{\text{endcup}} > 50 \text{ MeV}$;
 $\theta_{\text{rc}} < 10^\circ$; $0 \leq \text{TDC} \leq 14$;
 $N_\gamma \geq 1$;
- 4C kinematic fit ($\gamma K^+ K^-$);
- $\chi^2_{1C}(K^+ K^- \pi^+ \pi^+) < 200$;



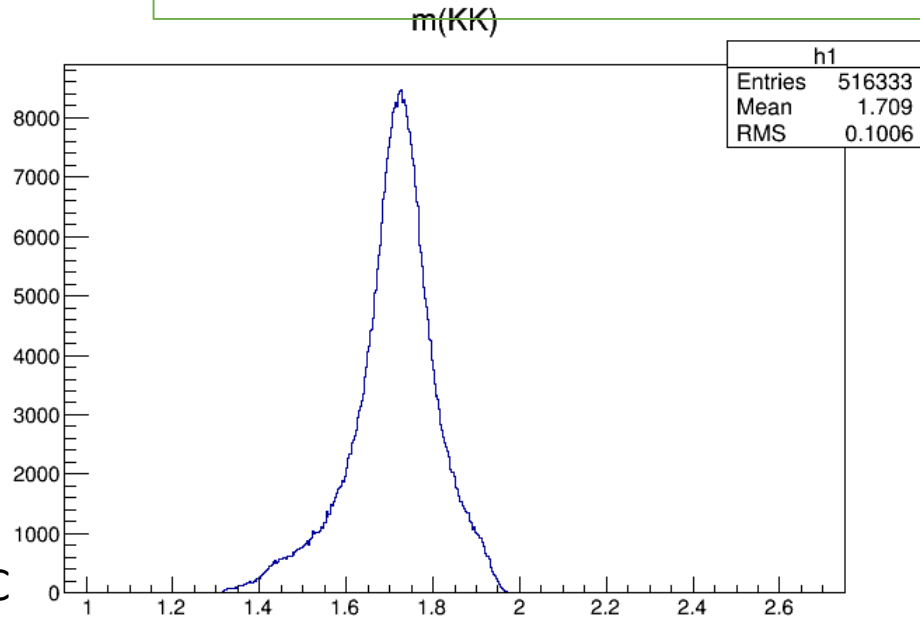
Event selection

- $P_K < P_K(2\text{Body}) + 3\sigma[2\mu, 2\pi]$;
- $P_\gamma(KK) > P_\gamma(f_0(1710)) - 0.2$;
- $|M^2_{\text{miss}}| < 0.05\text{GeV}^2$
- $120^\circ < \theta(Kp_Km) < 240^\circ_{[\cos\theta < -0.5]}$

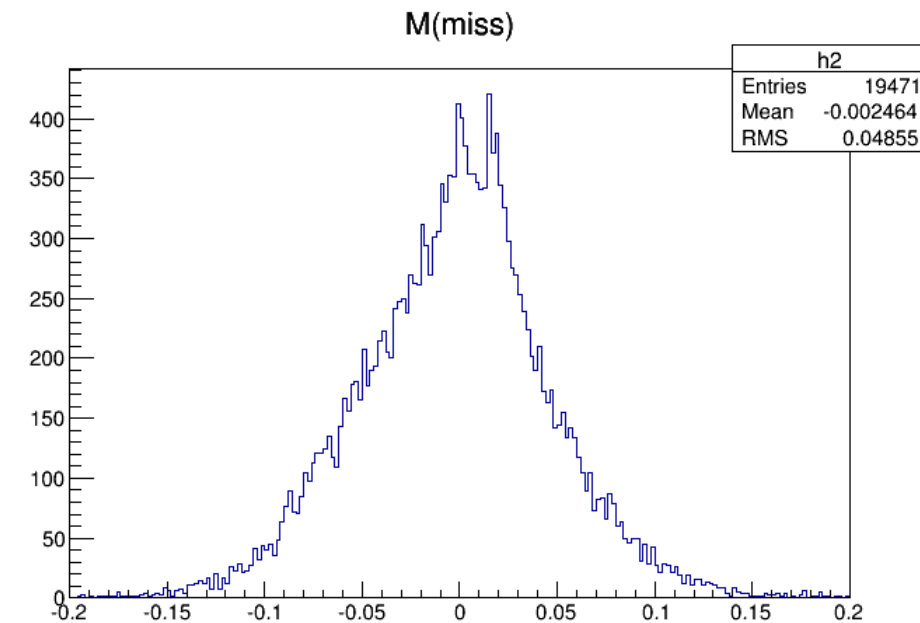
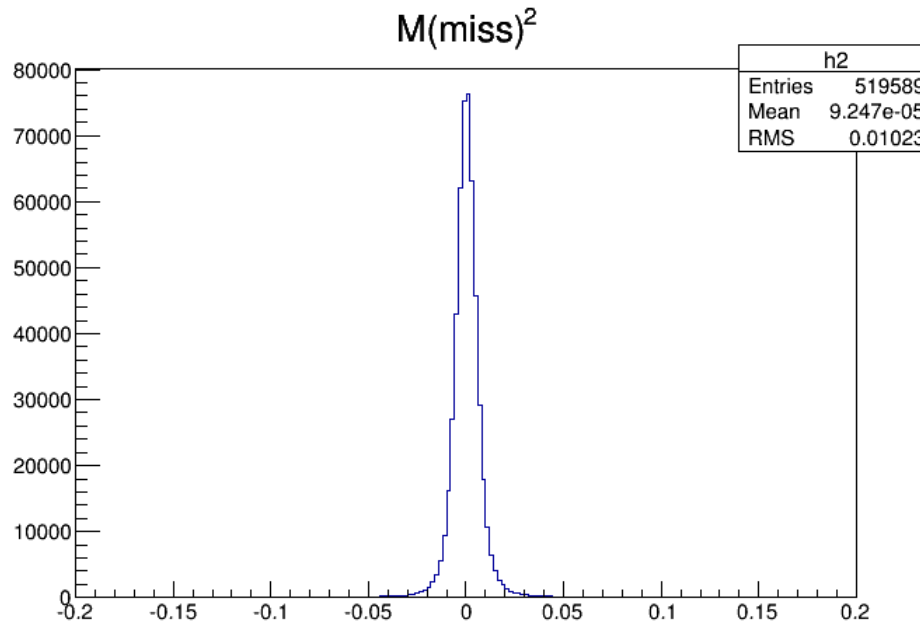
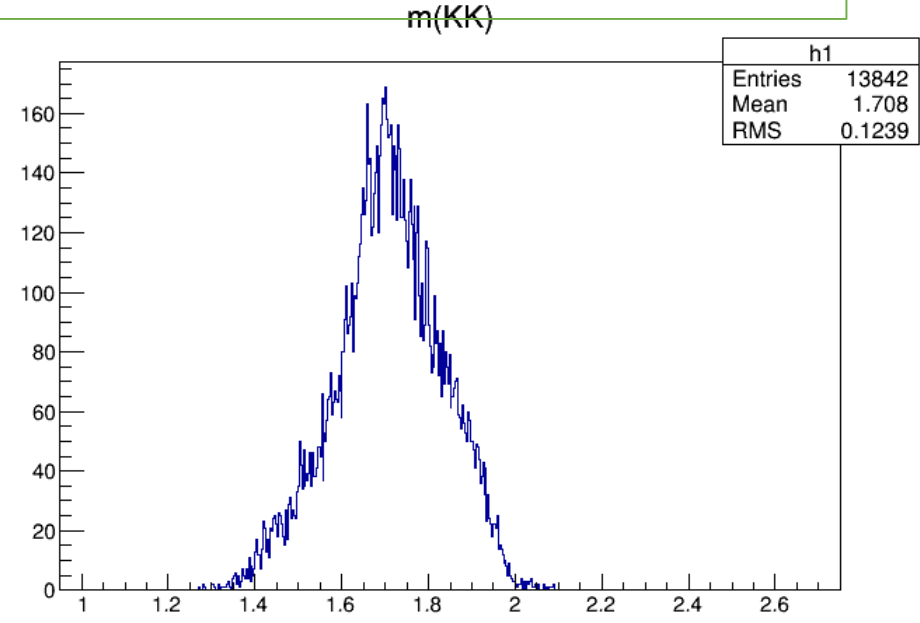


Compare with signal MC

Signal MC

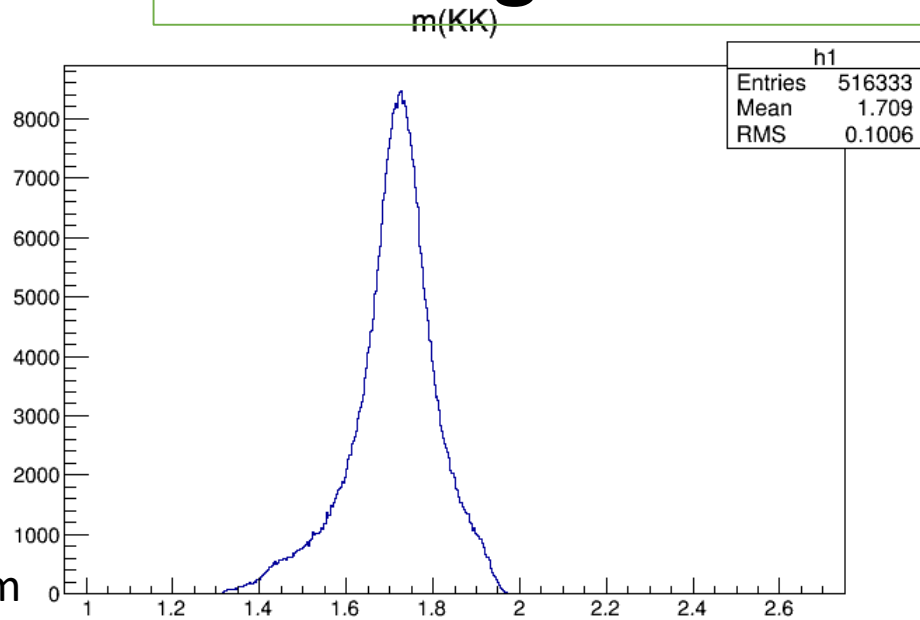


Data

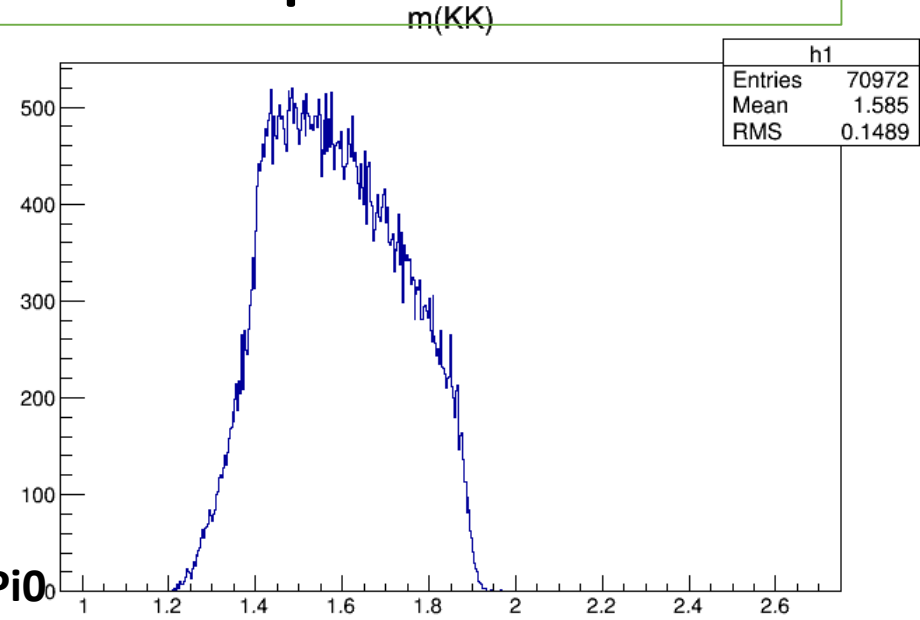


Signal MC compare with KpKmPi0

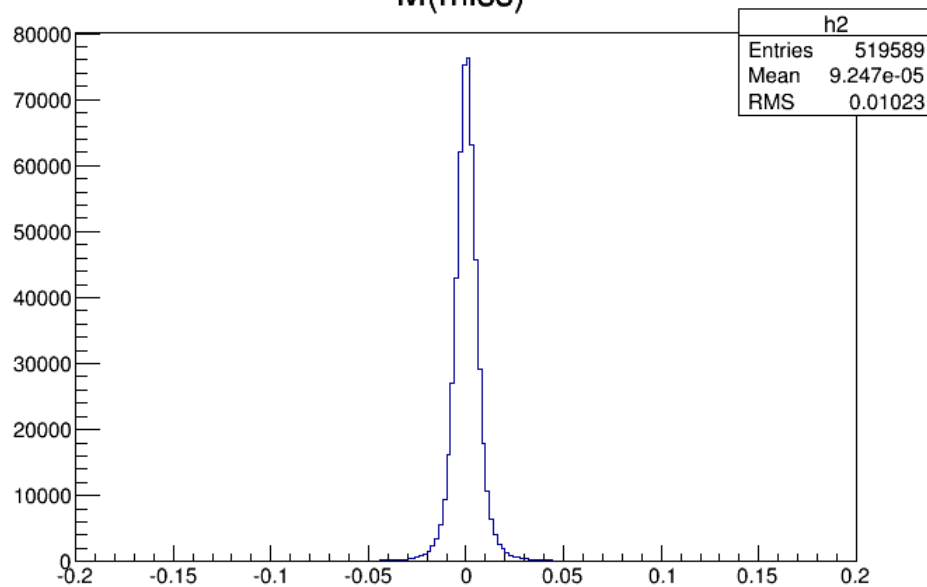
GamKpKm



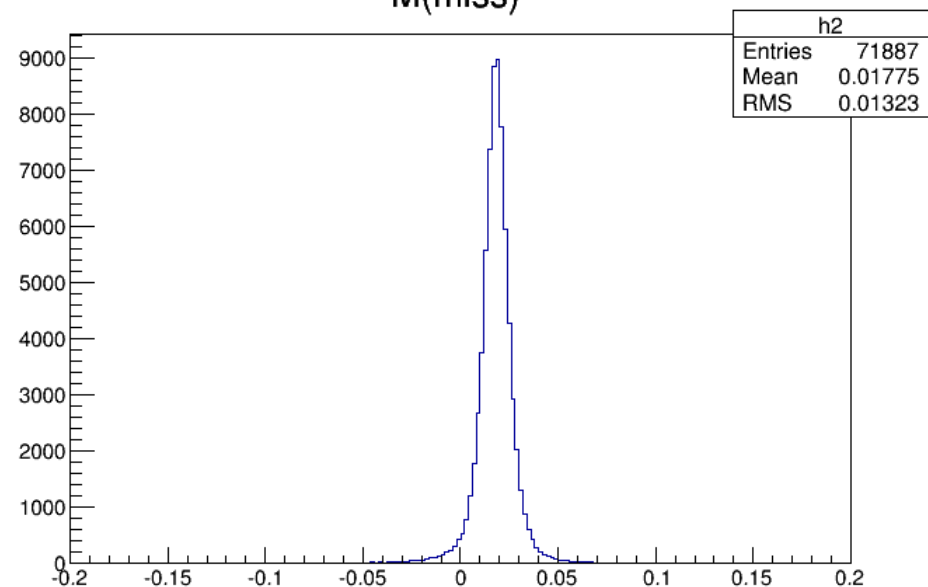
KpKmPi0



$M(\text{miss})^2$

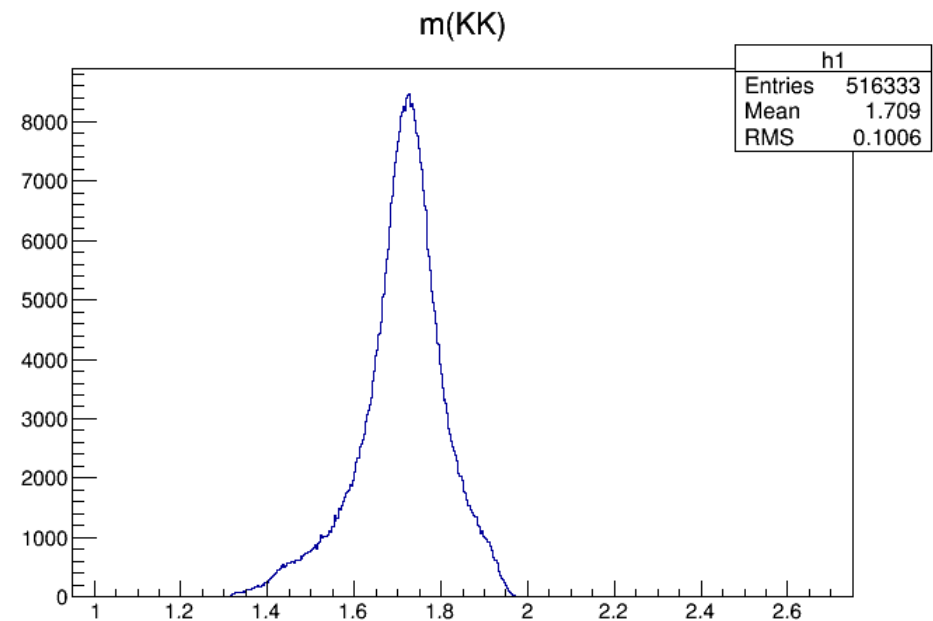
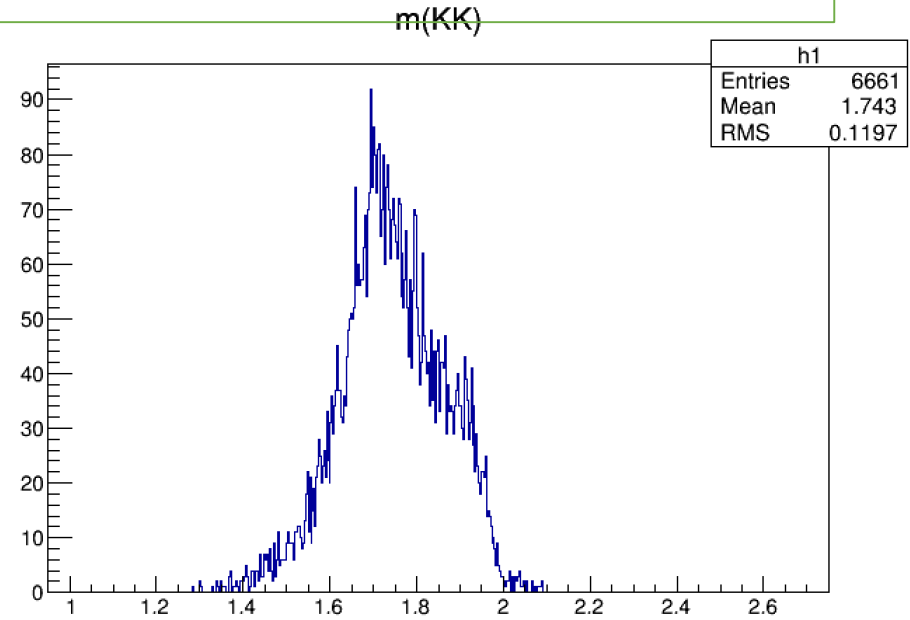
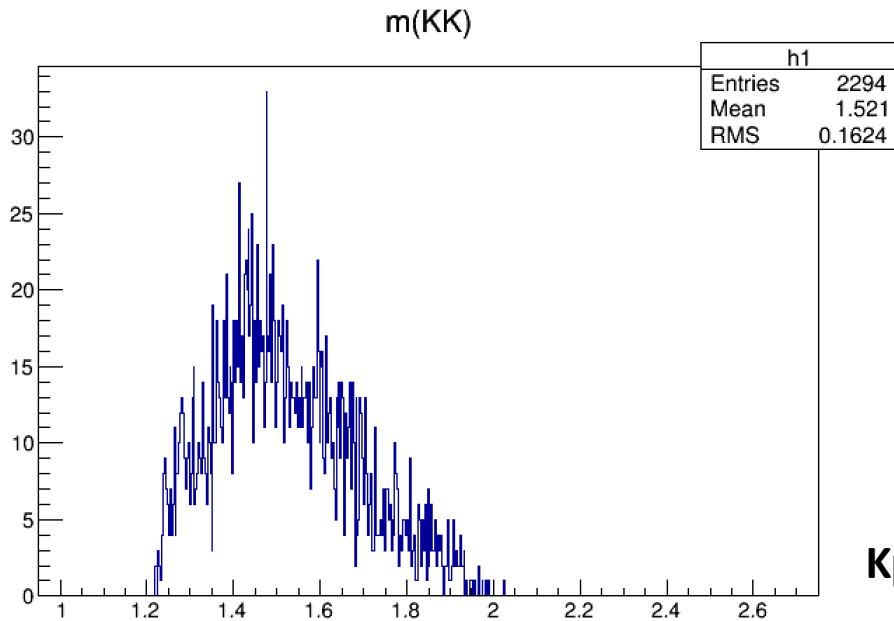


$M(\text{miss})^2$



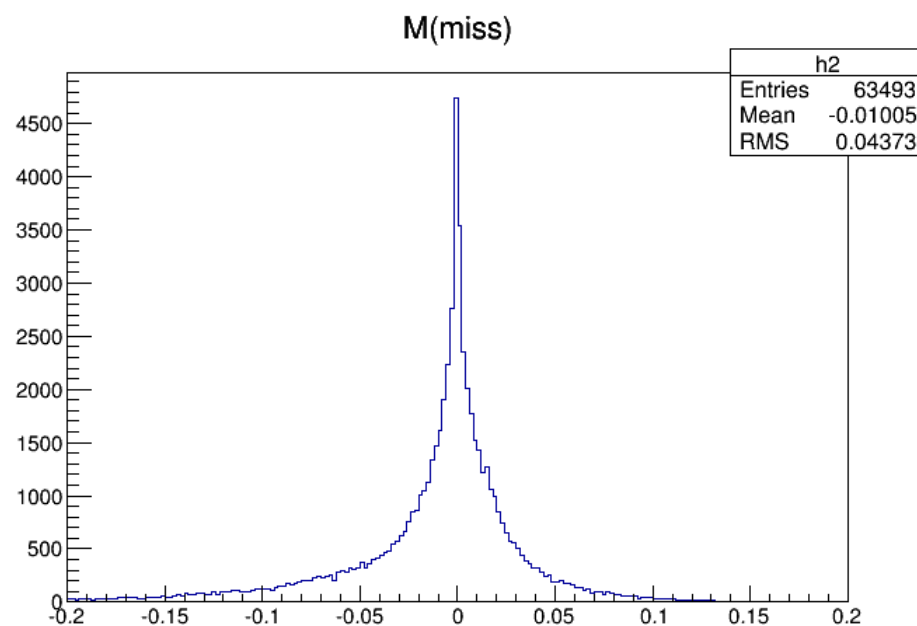
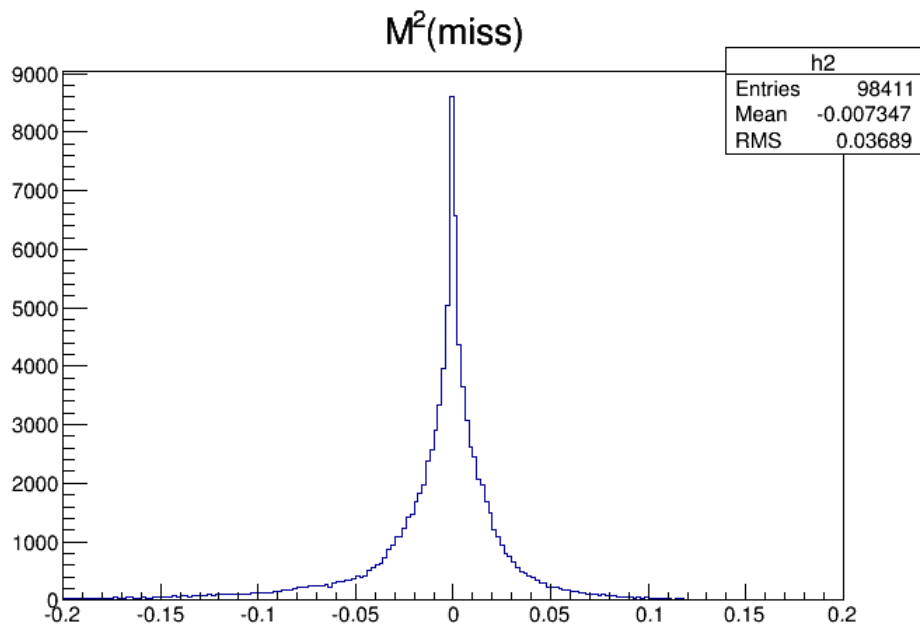
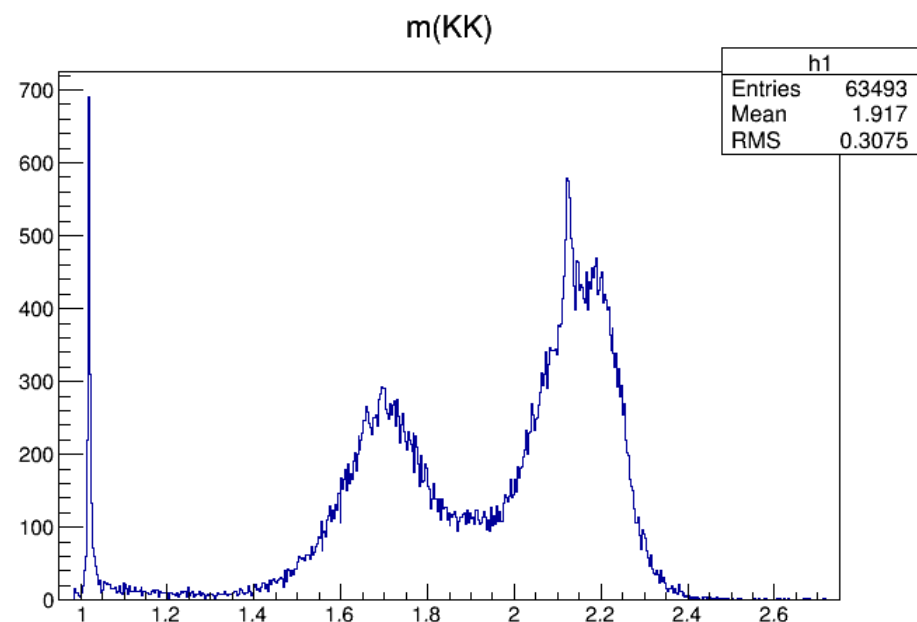
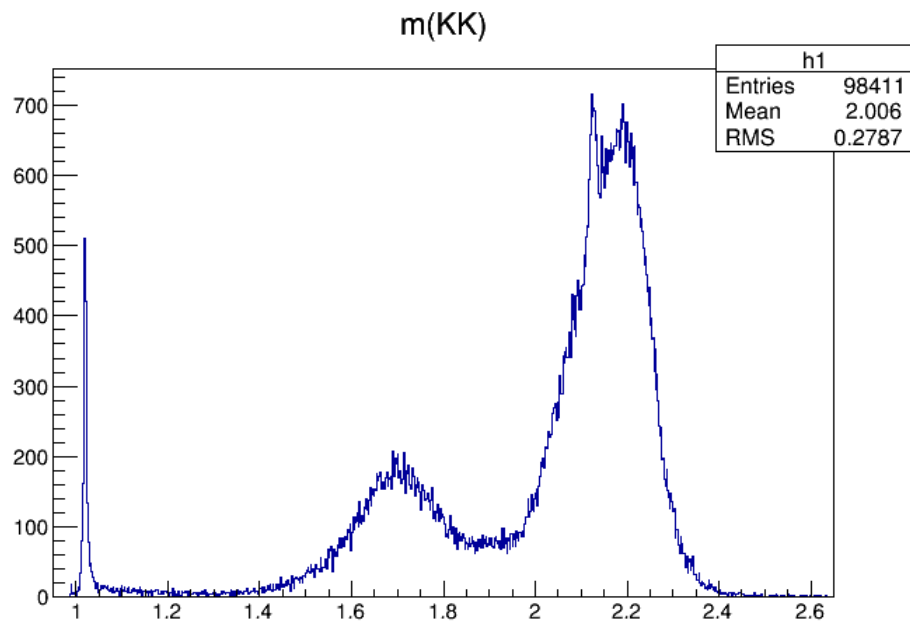
Event selection

- $-0.05 < M^2_{\text{miss}} < 0.0 \text{ GeV}^2$



Backup

Event selection



Event selection

