

RG-K Win18 (pass-2) vs. Spr24 (online) Data Comparison

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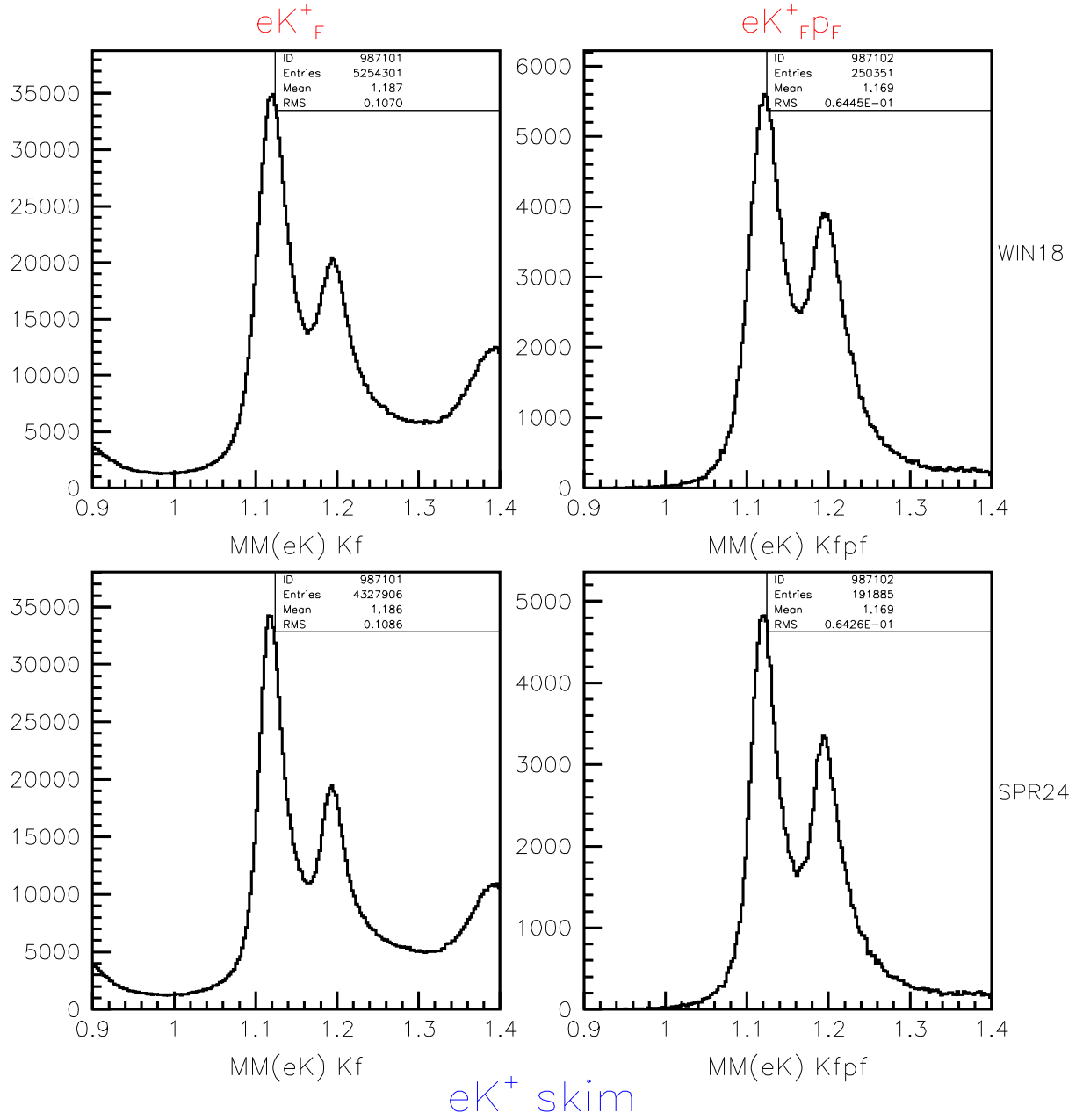


Figure 1: $MM(e'K^+)$ spectra from the RG-K Win18 and Spr24 datasets using the $e'K^+$ skim. The electron is reconstructed in the ECAL and the K^+ in the FD. The right plots also require a proton in the FD with a cut on the $MM^2(e'K^+p)$ distribution to select the ground state hyperons.

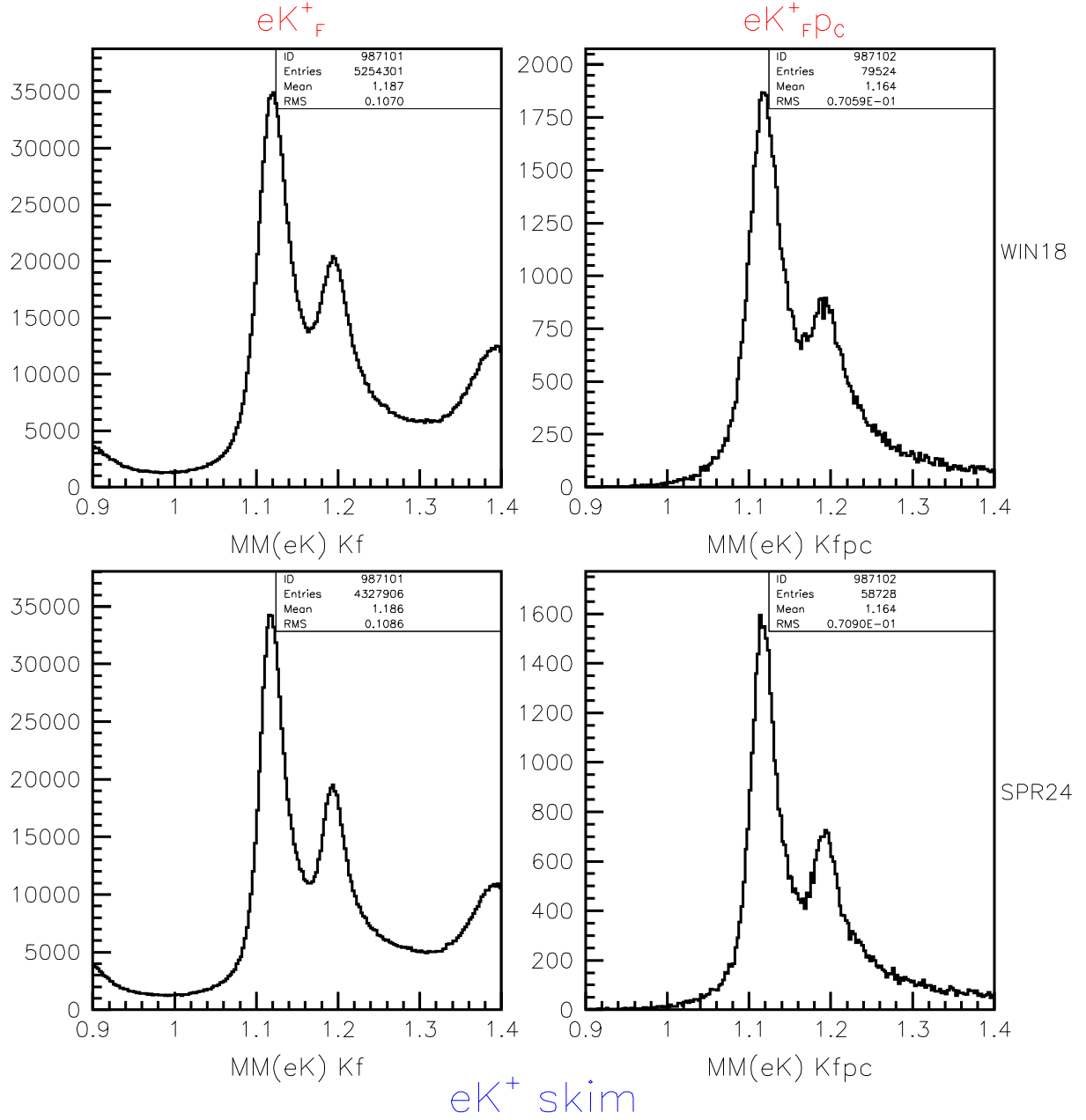


Figure 2: $MM(e'K^+)$ spectra from the RG-K Win18 and Spr24 datasets using the $e'K^+$ skim. The electron is reconstructed in the ECAL and the K^+ in the FD. The right plots also require a proton in the CD with a cut on the $MM^2(e'K^+p)$ distribution to select the ground state hyperons.

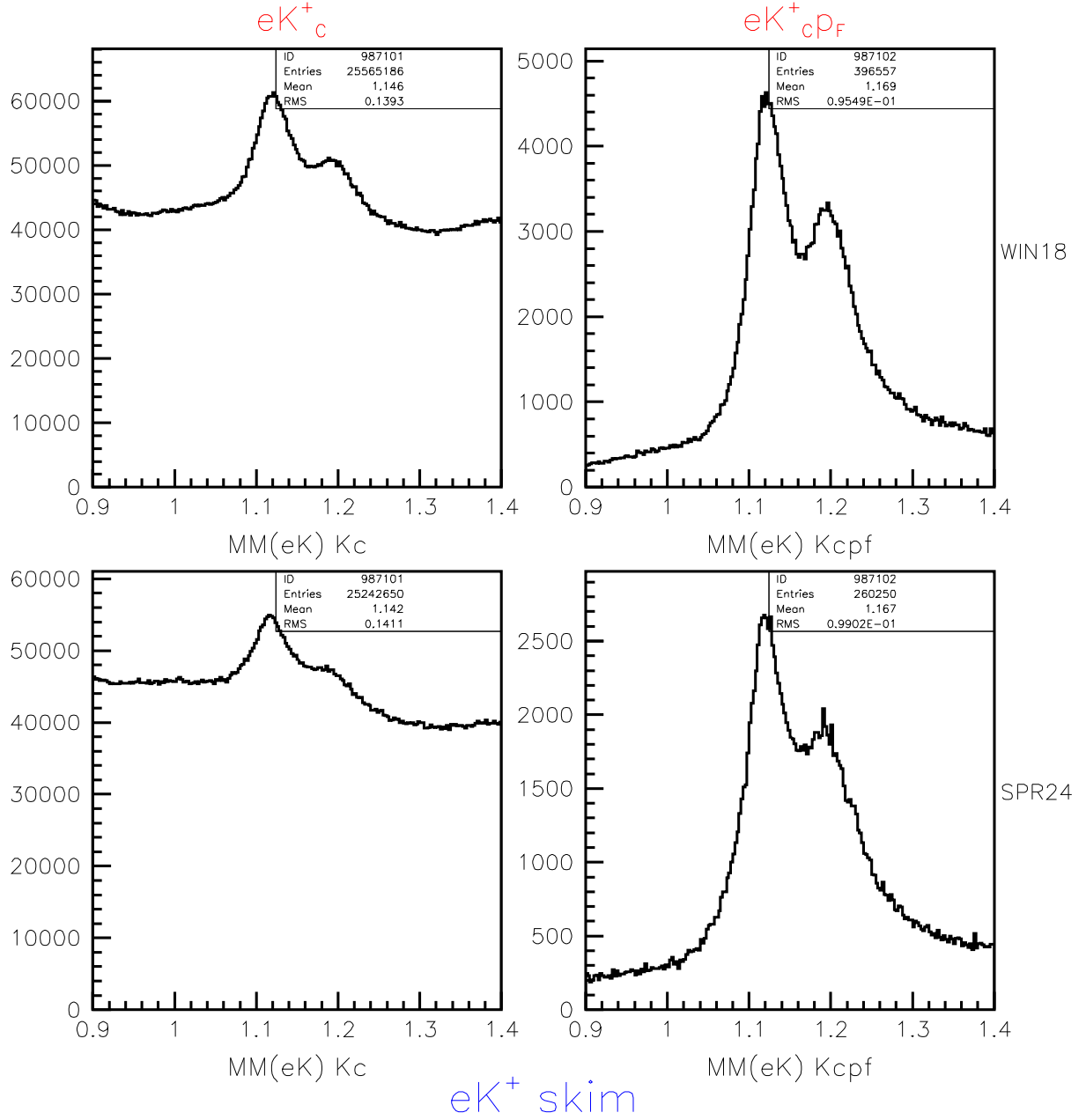


Figure 3: $MM(e'K^+)$ spectra from the RG-K Win18 and Spr24 datasets using the $e'K^+$ skim. The electron is reconstructed in the ECAL and the K^+ in the CD. The right plots also require a proton in the FD with a cut on the $MM^2(e'K^+p)$ distribution to select the ground state hyperons.

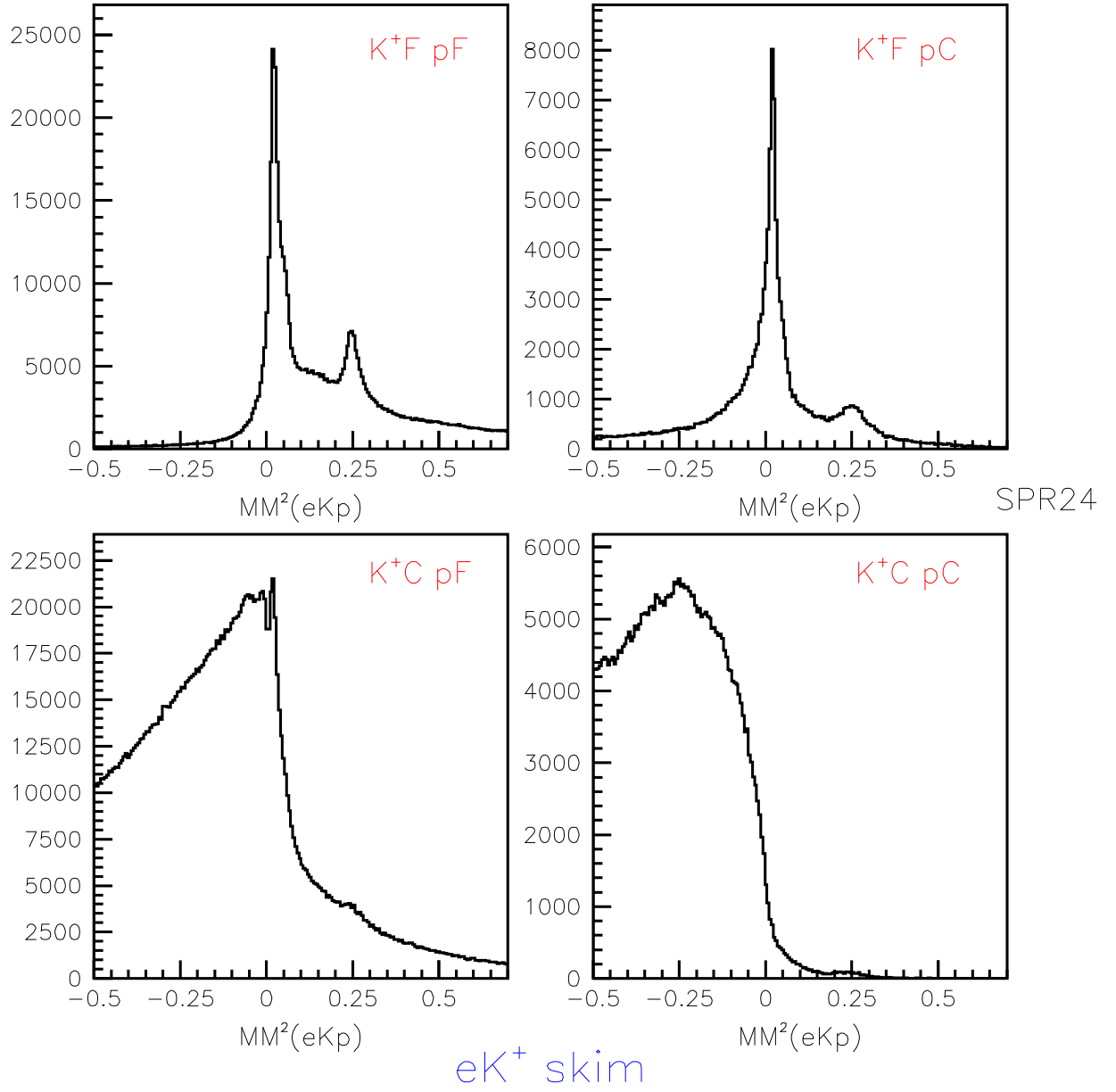


Figure 4: $MM^2(e'K^+p)$ spectra from the Spr24 dataset using the $e'K^+$ skim. The electron is reconstructed in the ECAL. (UL) $K_F^+p_F$, (UR) $K_F^+p_C$, (LL) $K_C^+p_F$, and (LR) $K_C^+p_C$.

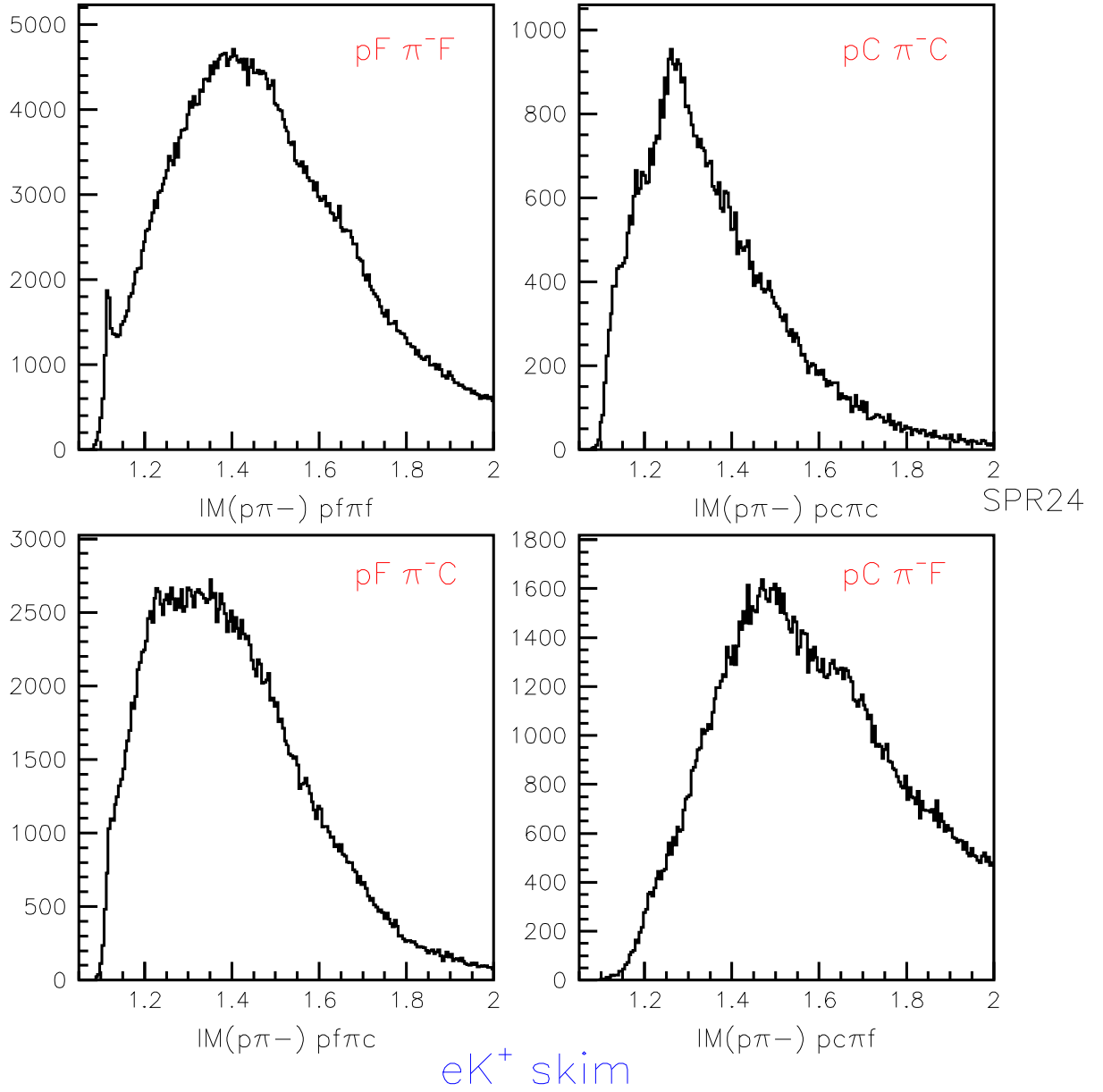


Figure 5: $M(p\pi^-)$ invariant mass spectra from the RG-K Spr24 dataset using the $e'K^+$ skim. The electron is reconstructed in the ECAL and no K^+ is specifically required (other than the loose skim condition). (UL) $p_F\pi_F^-$, (UR) $p_C\pi_C^-$, (LL) $p_F\pi_C^-$, and (LR) $p_C\pi_F^-$.

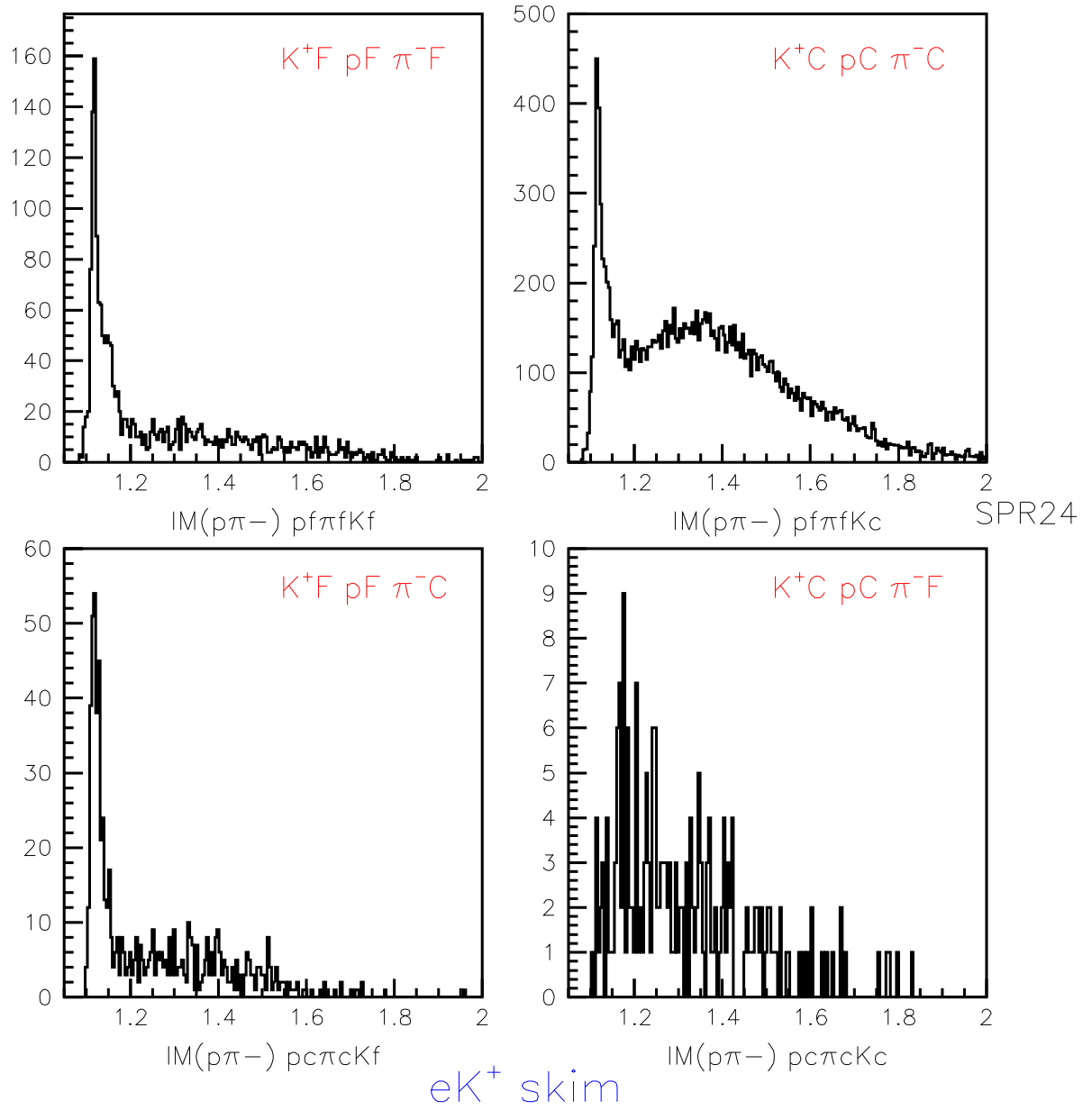


Figure 6: $M(p\pi^-)$ invariant mass spectra from the RG-K Spr24 dataset using the $e'K^+$ skim. The electron is reconstructed in the ECAL and the K^+ is reconstructed in the FD or CD. (UL) $p_F\pi_F^-$, (UR) $p_C\pi_C^-$, (LL) $p_F\pi_C^-$, and (LR) $p_C\pi_F^-$.

- Analysis:
 - EB PID
 - $\text{chi2pid} < 8$ (e' , hadrons), $p_{\min}=100$ MeV (CD)
 - β_{FD} : 0.4 - 1.1, β_{CD} : 0.2 - 1.1
- WIN18 (6.535 GeV, pass-2, 10.0.2): 5875, 5877, 5878, 5879, 5880, 5881, 5883, 5884, 5885, 5886, 5887, 5889, 5890, 5891, 5892, 5893
- SPR24 (6.394 GeV, online, 10.0.6): 19334, 19336, 19337, 19339, 19340, 19341, 19343, 19348, 19349