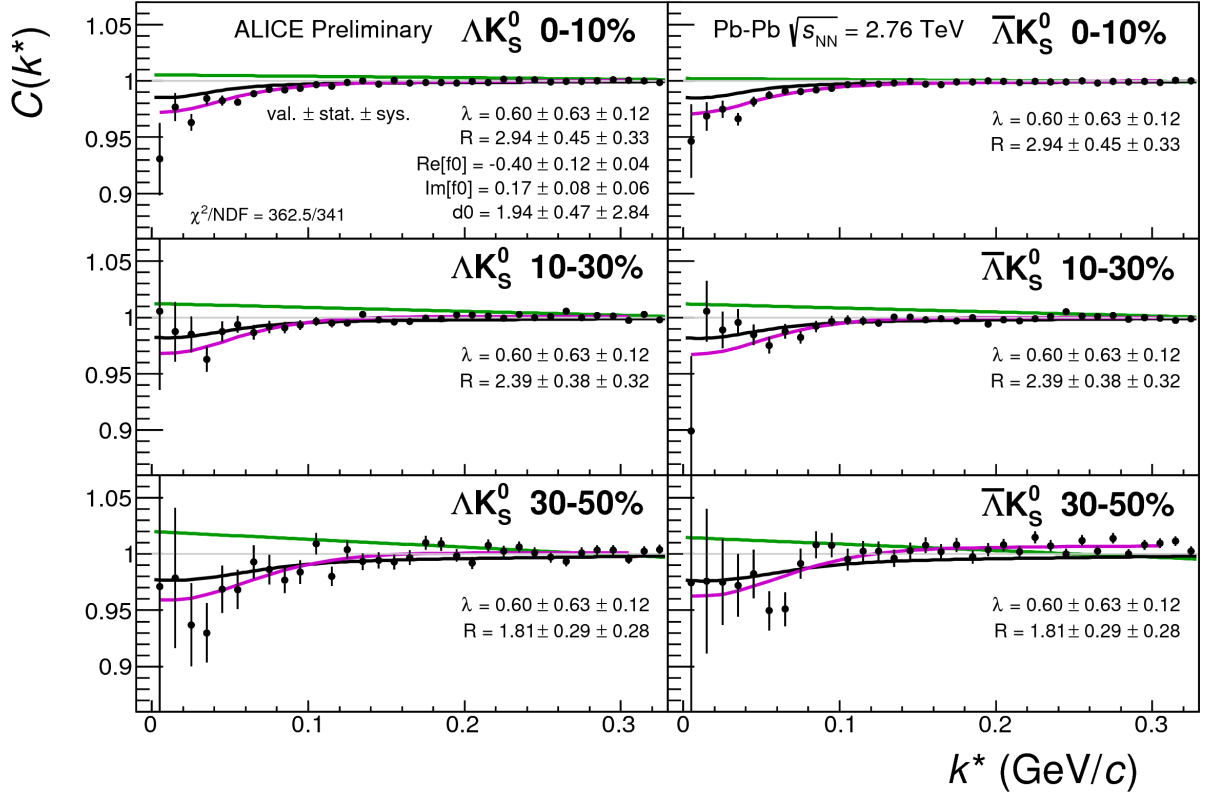
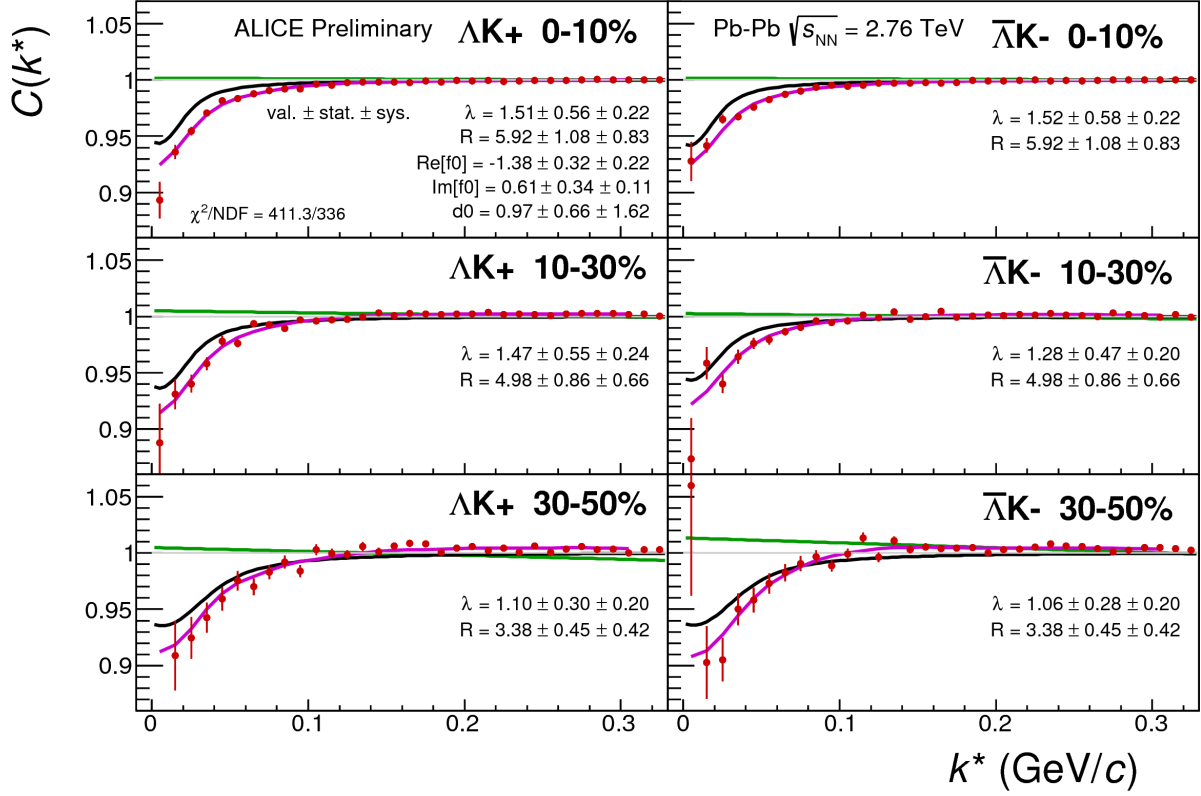


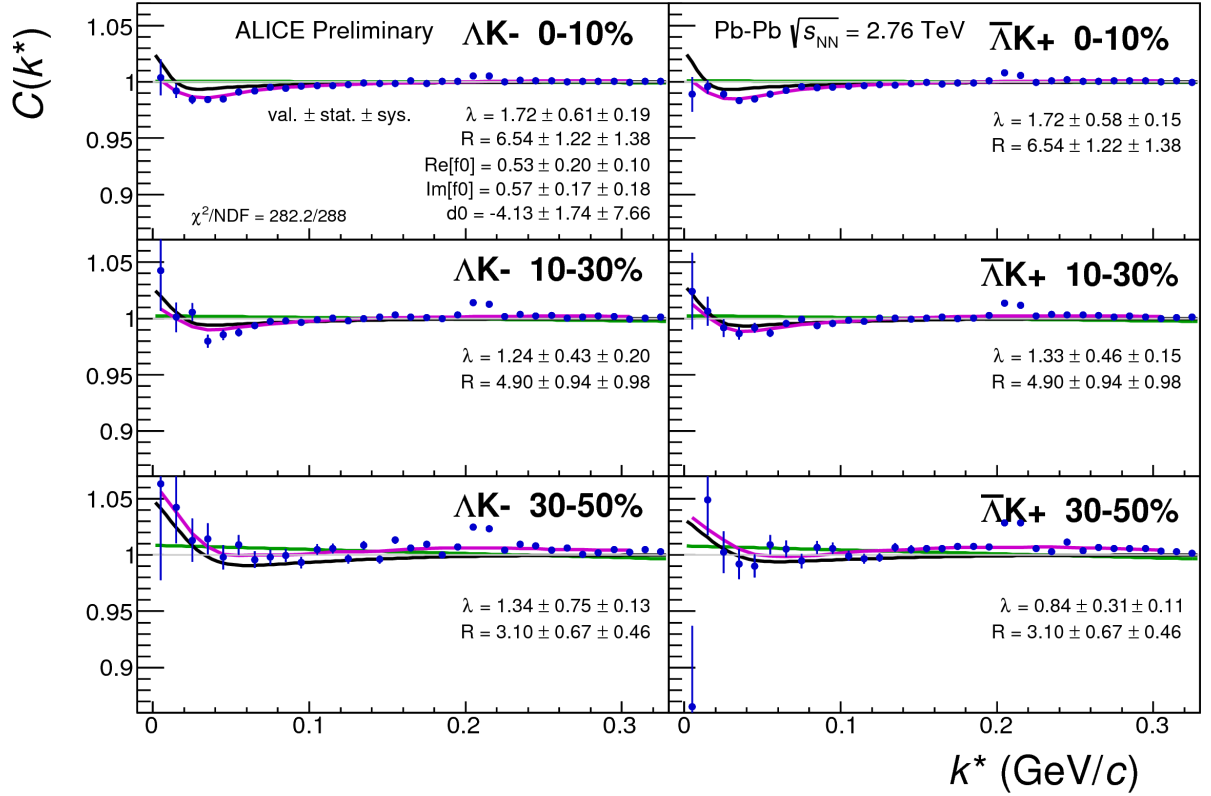
### 0.0.1 Results: $\Lambda K_S^0$ and $\bar{\Lambda} K_S^0$ : 10 Residual Correlations Included in Fit



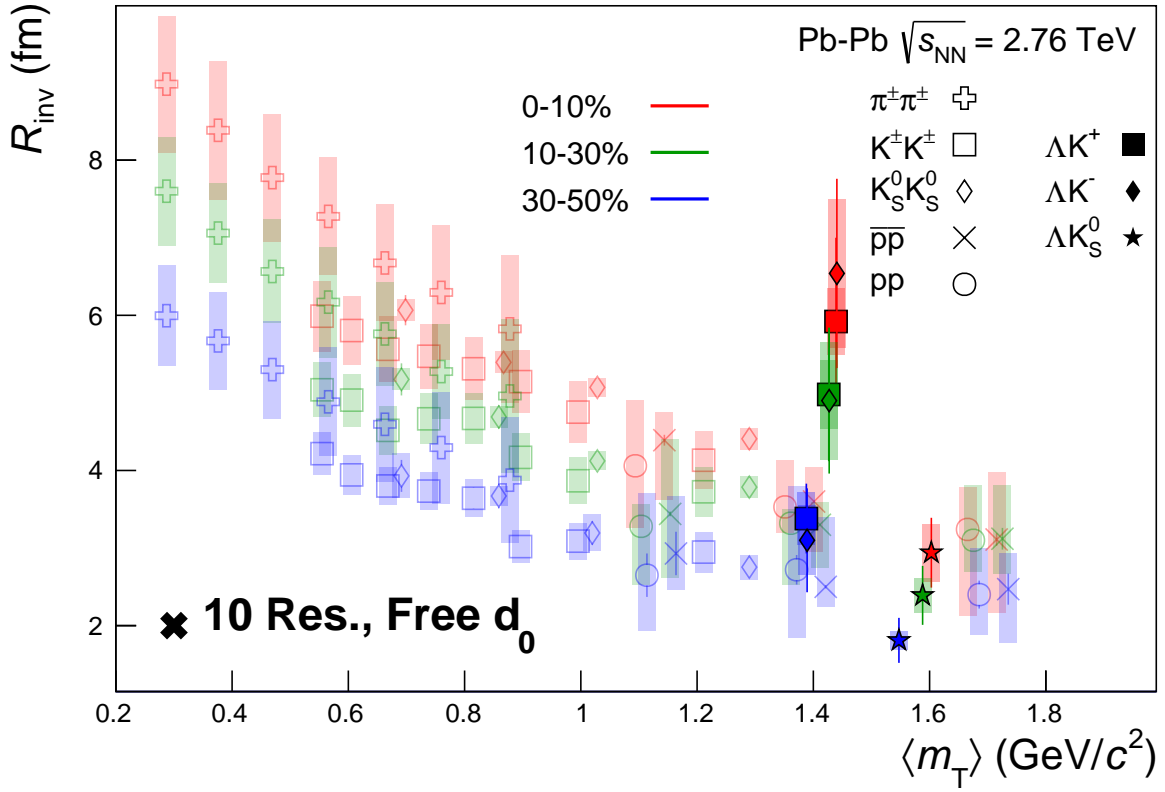
**Fig. 1:** Fits, with 10 residual correlations included, to the  $\Lambda K_S^0$  (left) and  $\bar{\Lambda} K_S^0$  (right) data for the centralities 0-10% (top), 10-30% (middle), and 30-50% (bottom). The lines represent the statistical errors, while the boxes represent the systematic errors. Each has unique  $\lambda$  and normalization parameters. The radii are shared amongst like centralities; the scattering parameters ( $\text{Re}[f_0]$ ,  $\text{Im}[f_0]$ ,  $d_0$ ) are shared amongst all. The black solid line represents the “raw” fit, i.e. not corrected for momentum resolution effects nor non-flat background. The green line shows the fit to the non-flat background. The purple points show the fit after momentum resolution and non-flat background corrections have been applied. The initial values of the parameters is listed, as well as the final fit values with uncertainties. Here,  $R$  was restricted to  $[2., 10.]$  and  $\Lambda$  was restricted to  $[0.1, 0.8]$ .



**Fig. 2:** Fits, with 10 residual correlations included, to the  $\Lambda K^+$  (left) and  $\bar{\Lambda} K^-$  (right) data for the centralities 0-10% (top), 10-30% (middle), and 30-50% (bottom). The lines represent the statistical errors, while the boxes represent the systematic errors. Each has unique  $\lambda$  and normalization parameters. The radii are shared amongst like centralities; the scattering parameters ( $\text{Re}[f_0]$ ,  $\text{Im}[f_0]$ ,  $d_0$ ) are shared amongst all. The black solid line represents the “raw” fit, i.e. not corrected for momentum resolution effects nor non-flat background. The green line shows the fit to the non-flat background. The purple points show the fit after momentum resolution and non-flat background corrections have been applied. The initial values of the parameters is listed, as well as the final fit values with uncertainties.



**Fig. 3:** Fits, with 10 residual correlations included, to the  $\Lambda K^-$  (left) with  $\bar{\Lambda} K^+$  (right) data for the centralities 0-10% (top), 10-30% (middle), and 30-50% (bottom). The lines represent the statistical errors, while the boxes represent the systematic errors. Each has unique  $\lambda$  and normalization parameters. The radii are shared amongst like centralities; the scattering parameters ( $\Re f_0$ ,  $\Im f_0$ ,  $d_0$ ) are shared amongst all. The black solid line represents the “raw” fit, i.e. not corrected for momentum resolution effects nor non-flat background. The green line shows the fit to the non-flat background. The purple points show the fit after momentum resolution and non-flat background corrections have been applied. The initial values of the parameters is listed, as well as the final fit values with uncertainties.



**Fig. 4:** 10 residual correlations in  $\Lambda K$  fits. Extracted fit  $R_{inv}$  parameters as a function of pair transverse mass ( $m_T$ ) for various pair systems over several centralities. The ALICE published data [?] is shown with transparent, open symbols. The new  $\Lambda K$  results are shown with opaque, filled symbols. In the left, the  $\Lambda K^+$  (with it's conjugate pair) results are shown separately from the  $\Lambda K^-$  (with it's conjugate pair) results. In the right, all  $\Lambda K^\pm$  results are averaged.