

Fit Results ΛK						
Centrality	λ	R	System	$\Re f_0$	$\Im f_0$	
0-10%	$1.10 \pm 0.36 \text{ (stat.)} \pm 0.02 \text{ (sys.)}$	$5.81 \pm 0.53 \text{ (stat.)} \pm 0.67 \text{ (sys.)}$	$\Lambda K^+ \text{ \& } \bar{\Lambda} K^-$	$-0.59 \pm 0.08 \text{ (stat.)} \pm 0.09 \text{ (sys.)}$	$0.45 \pm 0.14 \text{ (stat.)} \pm 0.12 \text{ (sys.)}$	0.37
10-30%	$0.76 \pm 0.11 \text{ (stat.)} \pm 0.08 \text{ (sys.)}$	$4.28 \pm 0.42 \text{ (stat.)} \pm 0.42 \text{ (sys.)}$	$\Lambda K^- \text{ \& } \bar{\Lambda} K^+$	$0.23 \pm 0.11 \text{ (stat.)} \pm 0.08 \text{ (sys.)}$	$0.35 \pm 0.09 \text{ (stat.)} \pm 0.07 \text{ (sys.)}$	-5.8
30-50%	$0.87 \pm 0.15 \text{ (stat.)} \pm 0.11 \text{ (sys.)}$	$3.47 \pm 0.38 \text{ (stat.)} \pm 0.33 \text{ (sys.)}$	$\Lambda K_S^0 \text{ \& } \bar{\Lambda} K_S^0$	$0.10 \pm 0.13 \text{ (stat.)} \pm 0.08 \text{ (sys.)}$	$0.61 \pm 0.16 \text{ (stat.)} \pm 0.13 \text{ (sys.)}$	-2.3

Table 1: Fit Results ΛK , with 3 residual correlations included. All ΛK analyses are fit simultaneously across all centralities (0-10%, 10-30%, 30-50%). Scattering parameters ($\Re f_0$, $\Im f_0$, d_0) are shared between pair-conjugate systems (e.g. ΛK^+ and $\bar{\Lambda} K^-$), but are unique between ΛK^+ , ΛK^- , and ΛK_S^0 . For each centrality, a radius and λ parameters are shared among all. Each analysis has a unique normalization parameter. The background is modeled by a (6th-)degree polynomial fit to THERMINATOR simulation for the ΛK^\pm systems, and with a linear form for the ΛK_S^0 . The fit is done on the data with only statistical error bars. The errors marked as “stat.” are those returned by MINUIT. The errors marked as “sys.” are those which result from my systematic analysis (as outlined in Section ??).