0.1 Model: ΛK^0_S, $\Lambda K^{\pm}$, $\Xi^{ch} K^0_S$

The two-particle relative momentum correlation function may be written theoretically by the Koonin-Pratt equation [?, ?]:

$$C(\mathbf{k}^*) = \int S(\mathbf{r}^*)|\Psi_{\mathbf{k}^*}(\mathbf{r}^*)|^2 d^3\mathbf{r}^* \tag{1}$$

In the absence of Coulomb effects, and assuming a spherically gaussian source of width R, the 1D femtoscopic correlation function can be calculated analytically using:

$$C(k^*) = 1 + \lambda[C_{QI}(k^*) + C_{FSI}(k^*)] \tag{2}$$

C_{QI} describes plane-wave quantum interference:

$$C_{QI}(k^*) = \alpha \exp(-4k^{*2}R^2) \tag{3}$$

where $\alpha = (-1)^{2j}/(2j+1)$ for identical particles with spin j, and $\alpha = 0$ for non-identical particles. Obviously, $\alpha = 0$ for all analyses presented in this note. C_{FSI} describes the s-wave strong final state interaction between the particles:

$$\begin{gathered} C_{FSI}(k^*) = (1+\alpha)[\tfrac{1}{2}|\tfrac{f(k^*)}{R}|^2(1-\tfrac{d_0}{2\sqrt{\pi}R}) + \tfrac{2\mathbb{R}f(k^*)}{\sqrt{\pi}R}F_1(2k^*R) - \tfrac{\mathbb{I}f(k^*)}{R}F_2(2k^*R)] \\ f(k^*) = (\tfrac{1}{f_0} + \tfrac{1}{2}d_0k^{*2} - ik^*)^{-1}; \quad F_1(z) = \int_0^z \tfrac{e^{x^2-z^2}}{z}dx; \quad F_2(z) = \tfrac{1-e^{-z^2}}{z} \end{gathered} \tag{4}$$

where R is the source size, $f(k^*)$ is the s-wave scattering amplitude, f_0 is the complex scattering length, and d_0 is the effective range of the interaction.