

1 Introduction

We present results from a femtoscopic analysis of Lambda-Kaon correlations in Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV by the ALICE experiment at the LHC. All pair combinations of Λ and $\bar{\Lambda}$ with K^+ , K^- and K_S^0 are analyzed. The femtoscopic correlations are the result of strong final-state interactions, and are fit with a parametrization based on a model by R. Lednicky and V. L. Lyuboshitz [?]. This allows us to both characterize the emission source and measure the scattering parameters for the particle pairs. We observe a large difference in the Λ - K^+ ($\bar{\Lambda}$ - K^-) and Λ - K^- ($\bar{\Lambda}$ - K^+) correlations in pairs with low relative momenta ($k^* \lesssim 100$ MeV). Additionally, the average of the Λ - K^+ ($\bar{\Lambda}$ - K^-) and Λ - K^- ($\bar{\Lambda}$ - K^+) correlation functions is consistent with our Λ - K_S^0 ($\bar{\Lambda}$ - K_S^0) measurement. The results suggest an effect arising from different quark-antiquark interactions in the pairs, i.e. $s\bar{s}$ in Λ - K^+ ($\bar{\Lambda}$ - K^-) and $u\bar{u}$ in Λ - K^- ($\bar{\Lambda}$ - K^+). To gain further insight into this hypothesis, we currently are conducting a Ξ -K femtoscopic analysis.