



Figure 1: This figure shows the invariant mass distribution of $K_S^0 \rightarrow \pi\pi$ in 5 pb^{-1} of collision data. Events are required to contain at least three good tracks to reject beam induced background, Bhabha scattering, and other low multiplicity background sources. The charged π tracks from the K_S^0 candidates are required to have a z -direction impact parameter, z_0 , in the range of -4 to 6 cm to ensure the tracks originate from near the interaction region. A vertex fitter based on a Kalman algorithm is used to fit the vertex to reject candidates where the tracks do not originate from near a common decay point. The internal document reference is BELLE2-NOTE-PH-2018-001.