- 1. Introduction
 - 1) Introduction to CEPC detector (its purpose, operation mode etc...).
 - 2) Motivation to reconstruct K-short and Lambda (the current state of particle reconstruction algorithm, their physical significance, the utility to the detector design.)
- 2. Software and Sample
 - 1) Introduction to Mokka and Marlin
 - Sample analysis
 Ks BR, energy, direction, creation/decay point, daughter track/particle reconstruction efficiency

Explain the loss of efficiency using pi+ (pi+ decay rate, rate of interaction with tracker material (and dependency with momentum), end point, energy, track and particle reconstruction efficiency)

- 3. Reconstruction Method and Result Analysis
 - 1) Only using tracks, find the vertex using geometrical method.
 - 2) Vertex reconstruction error and mass resolution using known daughter tracks. And various other relationships (vtx reco err vs mass, vtx distance vs mass, ks direction/pi+ direction vs mass resolution etc)
 - 3) Apply the method to the sample \rightarrow mass resolution, efficiency, purity
 - 4) Background analysis
 - 5) Same thing for Lambda
 - 6) The method is consistent with Armenteros plot.
 - Assume PID has 100% purity without losing its efficiency. Try to eliminate some backgrounds using track—particle matching→mass resolution, efficiency, purity
 - 8) Comparison to other experiments
 - 9) Potential requirement on the detector & reconstruction algorithms
- 4. Conclusion
 - 1) The results are reasonable.
 - 2)