2025.01.21

Current working:

1. study the backgrounds on the process

2. Rewrite the code to calculate CPT-Violation following the paper

Next planning:

* Cross check the results with Yunhe’s results and see what’s happen

2025.01.28

Current working:

1. Check the results with Yunhe’s results.

2. Recalculate the background to decrease more.

Next planing:

* Compare the results for Signal MC, Inclusive MC, and real data.

2025.02.04

Current working:

1. Compare the results for Signal MC, Inclusive MC, and real data.

Next planning:

* Use the real data to calculate T/CP violation.

2025.02.11

Current working:

1. Calculate the T/CP violation but the results are weird to explain in the equation on the paper

Next planning:

* Check and calculate to get the results for T/CP violation again to make sure that my first calculate was right.

2025.02.18

Current working:

1. Calculate the T/CP violation and the results are still weird to be following the equation on the paper

Next planning:

* Find the other papers to review how they did and compare their method with our method

2025.02.25

Current working:

1. Read paper “Search for CP/T violation in r decays at Belle” (Belle colaboration)

[<https://doi.org/10.1103/PhysRevD.97.011101>]

2. Read paper “Measurement of the Lepton Mass and an Upper Limit on the Mass Difference between and (Belle colaboration) [<https://doi.org/10.1103/PhysRevLett.99.011801>]

Next planning:

* Understand the method and criteria to get tau lepton and follow the method to calculate T/CP violation from Belle collaboration

2025.03.04

Current working:

1. Calculate the statistic error for R values and delta values in the calculation part of T/CP violation

2. Follow the method and criteria to get tau lepton and follow the method to calculate T/CP violation from Belle collaboration

Next planning:

* Try to understand and solve the problem of my study

2025.04.01

Current working:

1. Check the analysis code and find the different things between I and Yunhe. I found some problem about the collected data I will show in the meeting

2. Do the cut flow table for Signal MC

Next planning:

* I would like ask the suggestions about the problem between I and Yunhe to know the way to do next

2025.04.08

Current working:

1. I and Yunhe have solved the problem with analysis code and calculated the results, including a comparison between Yunhe’s results and mine.

Next planning:

* I'm going to calculate the uncertainty (systematic and statistical) to determine whether the differences in results between Yunhe and me in different event selections are acceptable.