NMSU Update

Dinupa

April 13, 2023

- We use the cuts for MC, raw and mix data. Some physics cuts are;

```
4.5 < mass && mass < 8.8
D < 200.
```

- We use the same bin combination for real and MC data.

```
mass = {2, 4.5, 6.5};
pT = {3, 0., 1.5};
xF = {4, 0., 0.8};
phi = {20, -pi, pi};
costh = {20, -0.5, 0.5};
```

- In this study we have not subtract the flask background.

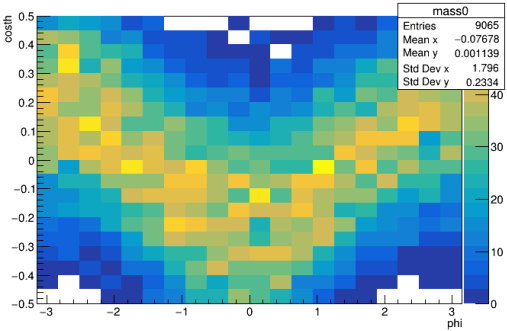

Figure 1: mass bin 0.

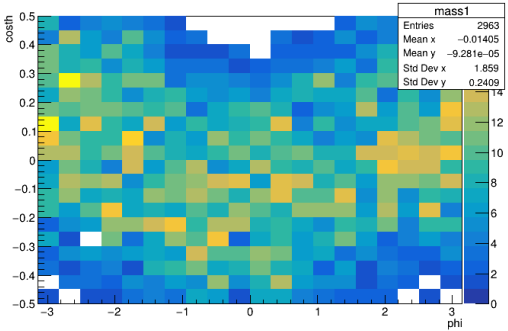

Figure 2: mass bin 1.

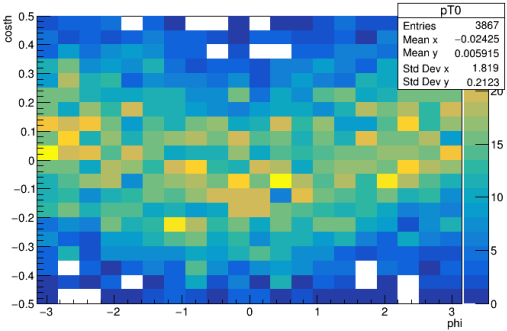

Figure 3: pT bin 0.

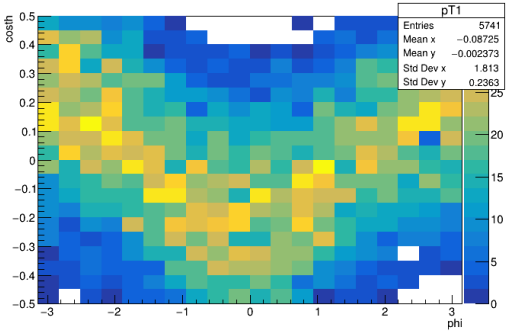

Figure 4: pT bin 1.

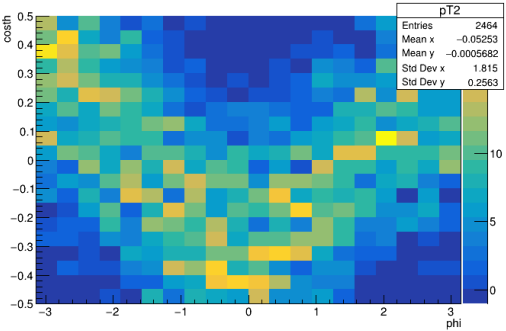

Figure 5: pT bin 2.

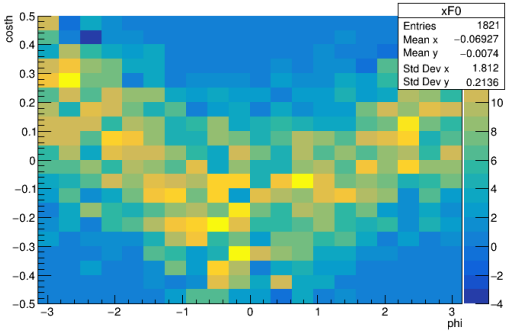

Figure 6: xF bin 0.

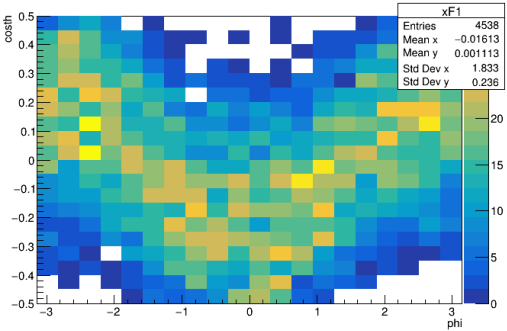

Figure 7: xF bin 1.

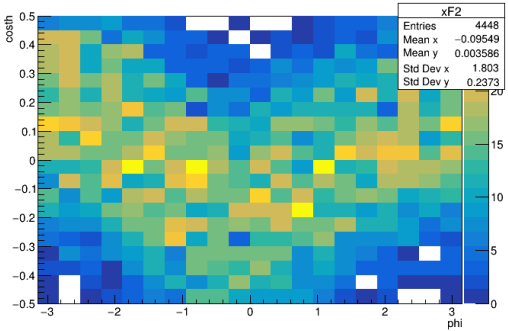

Figure 8: xF bin 2.

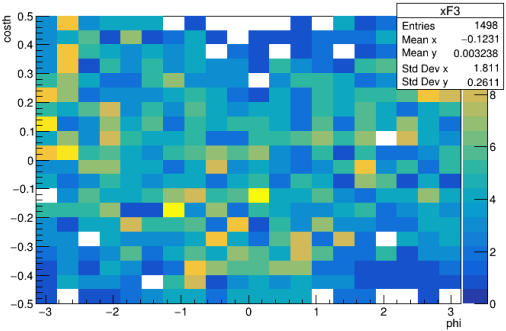

Figure 9: xF bin 3.

1st mass bin

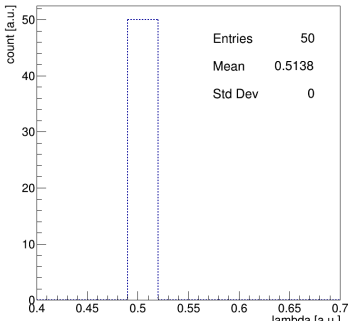

Figure 10: lambda.

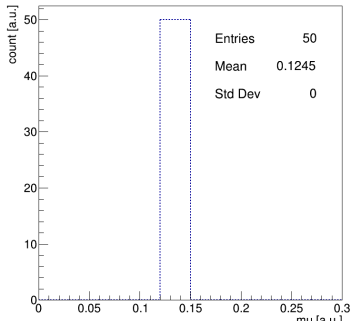

Figure 11: mu.

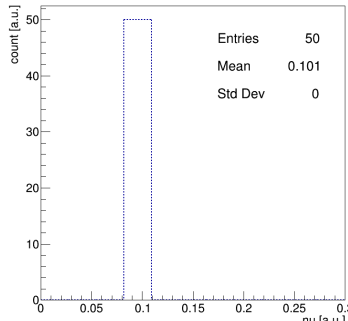

Figure 12: nu.

2nd mass bin

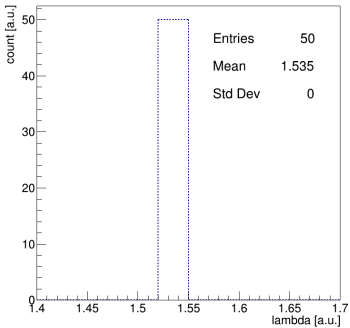

Figure 13: lambda.

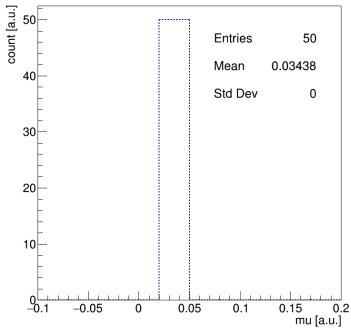

Figure 14: mu.

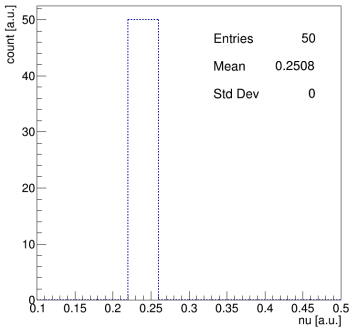

Figure 15: nu.

1st pT bin

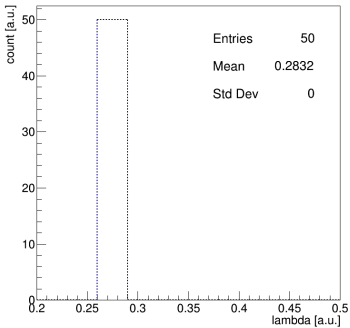

Figure 16: lambda.

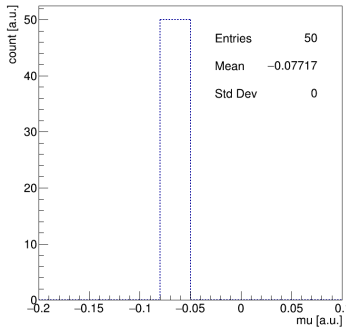

Figure 17: mu.

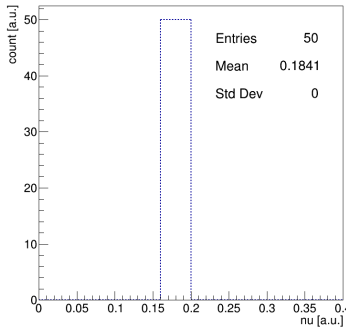

Figure 18: nu.

2nd pT bin

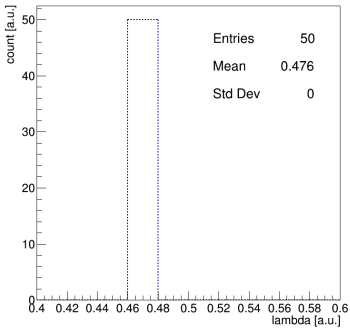

Figure 19: lambda.

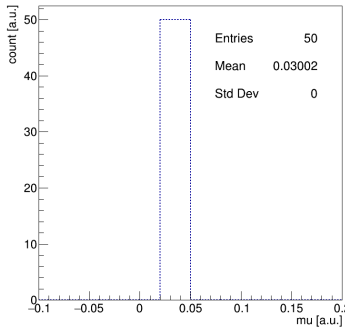

Figure 20: mu.

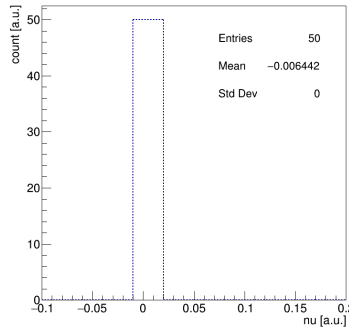

Figure 21: nu.

3rd pT bin

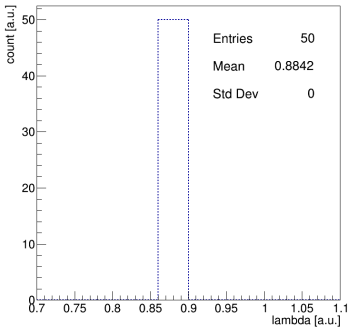

Figure 22: lambda.

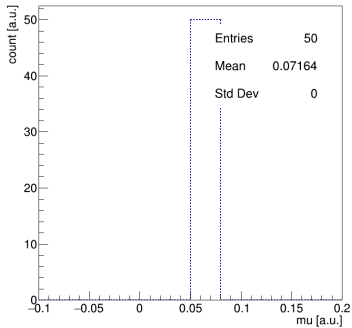

Figure 23: mu.

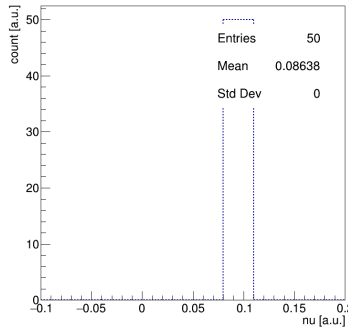

Figure 24: nu.

1st xF bin

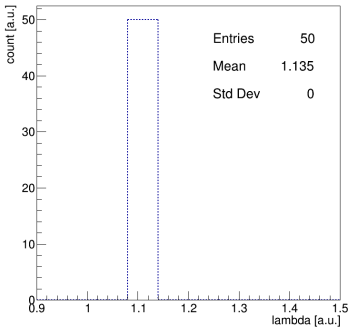

Figure 25: lambda.

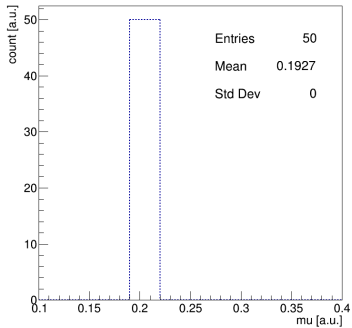

Figure 26: mu.

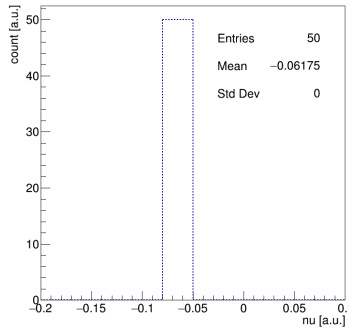

Figure 27: nu.

2nd xF bin

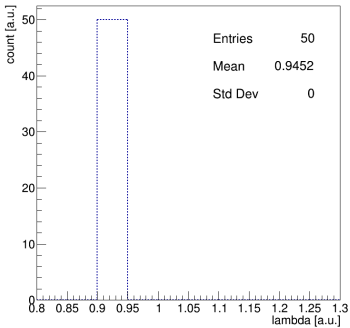

Figure 28: lambda.

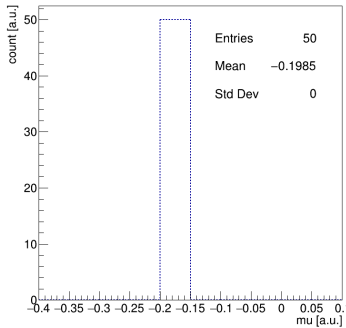

Figure 29: mu.

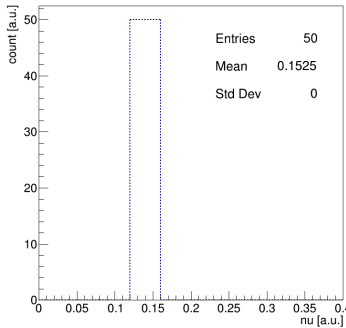

Figure 30: nu.

3rd xF bin

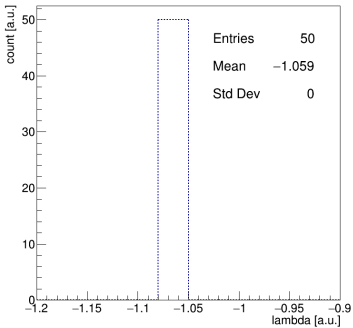

Figure 31: lambda.

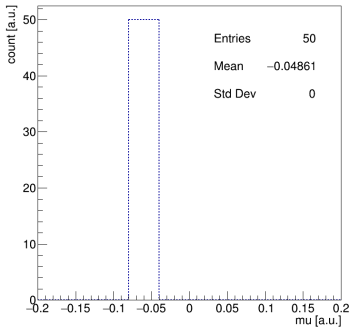

Figure 32: mu.

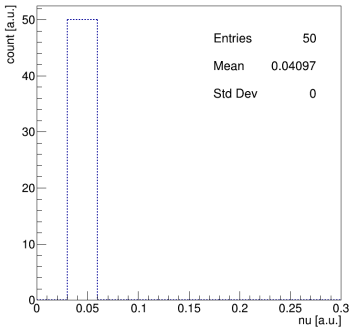

Figure 33: nu.

4th xF bin

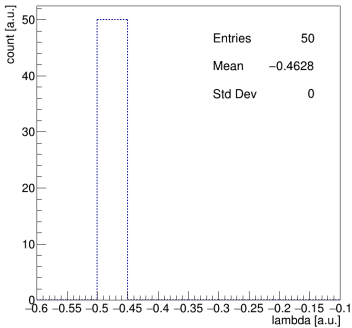

Figure 34: lambda.

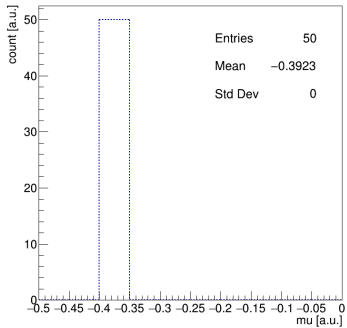

Figure 35: mu.

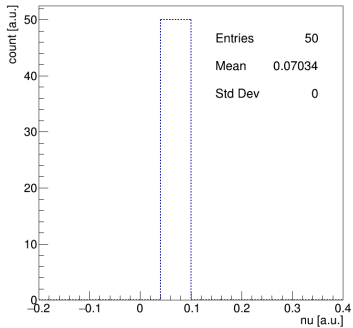

Figure 36: nu.

Final

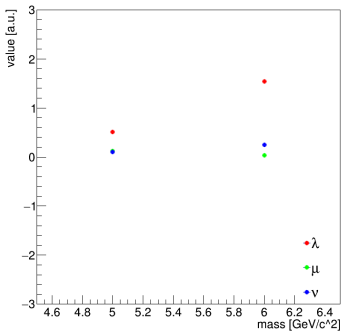

Figure 37: mass.

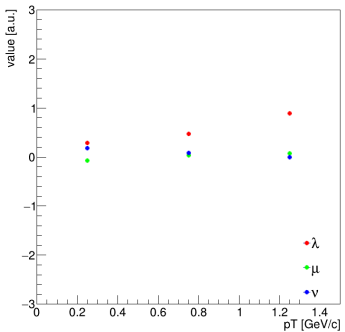

Figure 38: pT.

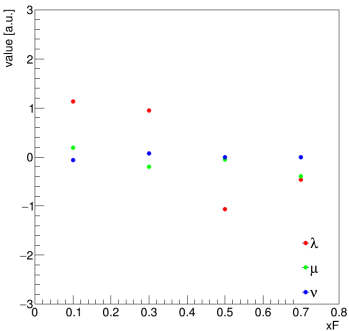

Figure 39: xF.