

ProjectRun

July 3, 2022

```
[ ]: from utils import *
```

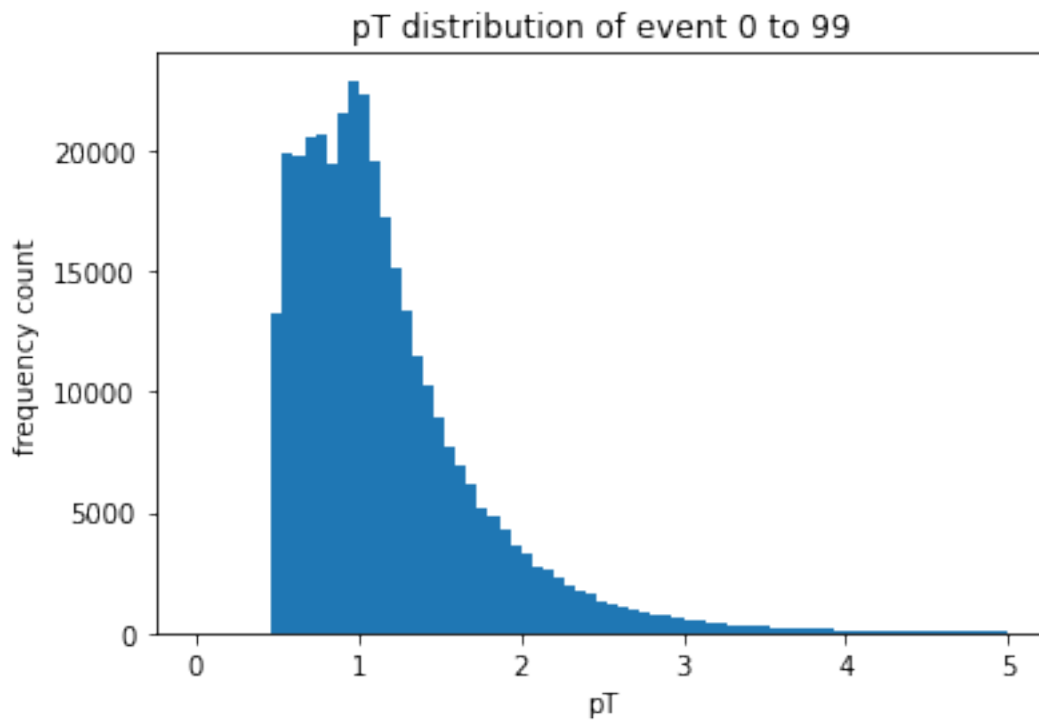
```
[ ]: event_0to99 = importpdrange(0,99)
      print(event_0to99.shape)
```

```
importing event 1
importing event 2
importing event 3
importing event 4
importing event 5
importing event 6
importing event 7
importing event 8
importing event 9
importing event 10
importing event 11
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importing event 26
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importing event 28
importing event 29
importing event 30
importing event 31
importing event 32
importing event 33
```

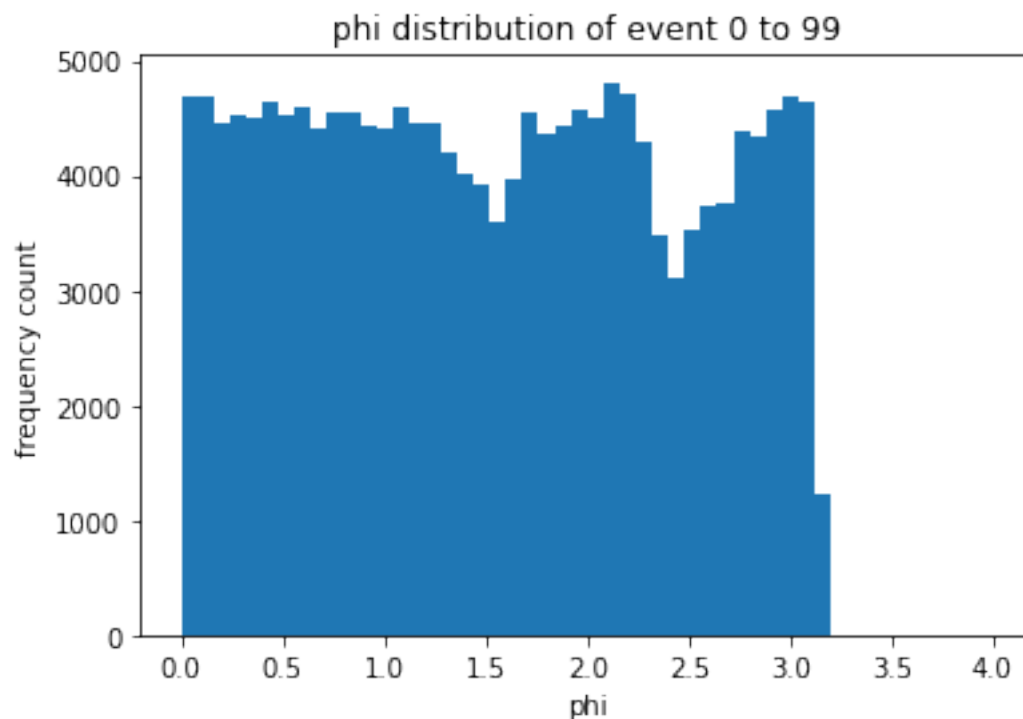
importing event 34
importing event 35
importing event 36
importing event 37
importing event 38
importing event 39
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importing event 44
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importing event 80
importing event 81

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importing event 82
importing event 83
importing event 84
importing event 85
importing event 86
importing event 87
importing event 88
importing event 89
importing event 90
importing event 91
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importing event 93
importing event 94
importing event 95
importing event 96
importing event 97
importing event 98
importing event 99
(34179, 4)
```

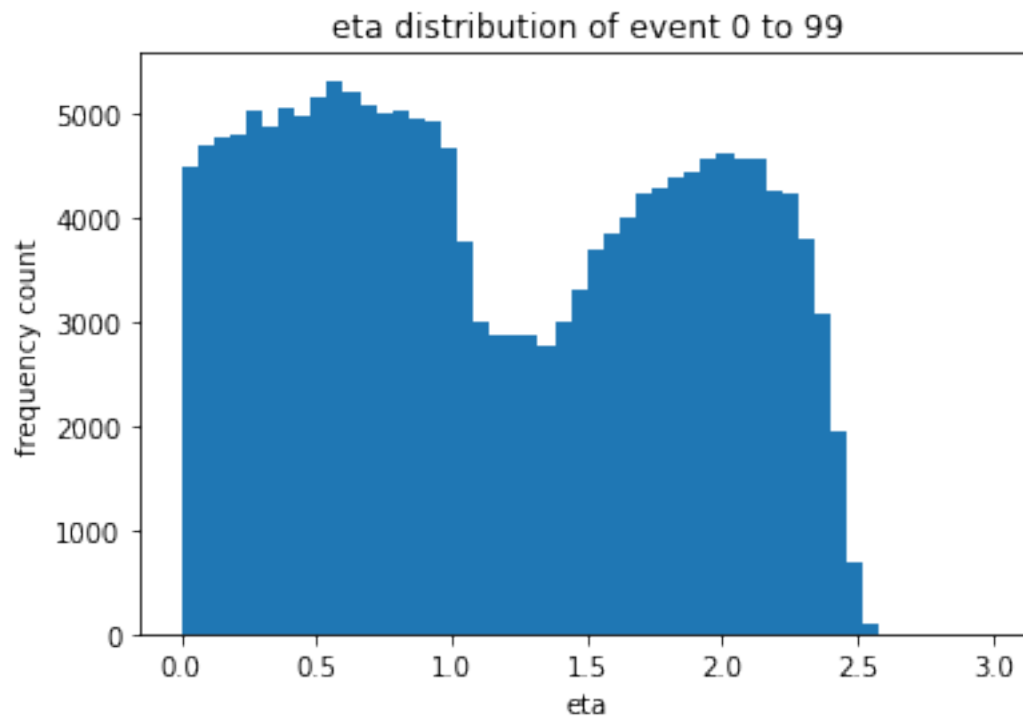
```
[ ]: plt.hist(event_0to99['pt'], bins=75, range=(0,5))
plt.title("pT distribution of event 0 to 99")
plt.ylabel('frequency count')
plt.xlabel('pT')
plt.show()
```



```
[ ]: plt.hist(event_0to99['phi'], bins=50, range=(0,4))
plt.title("phi distribution of event 0 to 99")
plt.ylabel('frequency count')
plt.xlabel('phi')
plt.show()
```



```
[ ]: plt.hist(event_0to99['eta'], bins=50, range=(0,3))
plt.title("eta distribution of event 0 to 99")
plt.ylabel('frequency count')
plt.xlabel('eta')
plt.show()
```



```
[ ]: plt.hist(event_0to99['charge'], bins=50, range=(-1.5,1.5))
plt.title("charge distribution of event 0 to 99")
plt.ylabel('frequency count')
plt.xlabel('charge')
plt.show()
```

