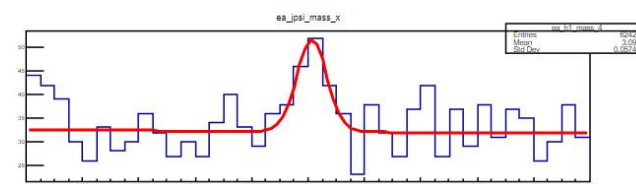
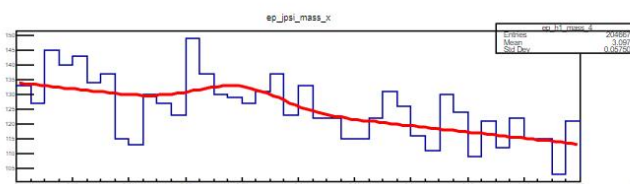
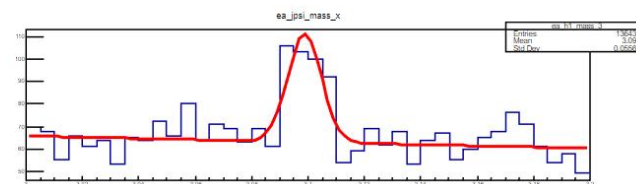
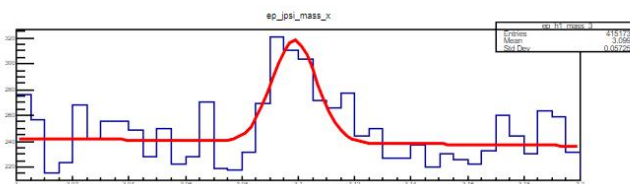
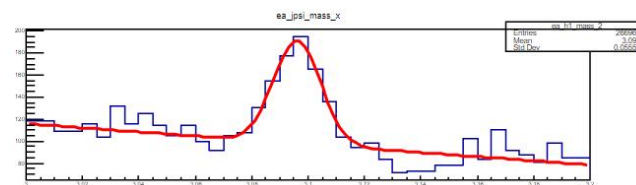
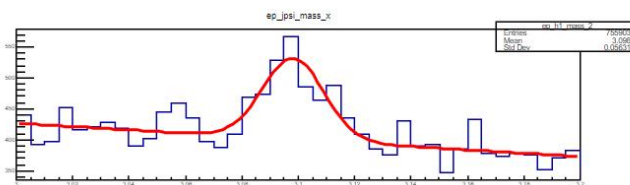
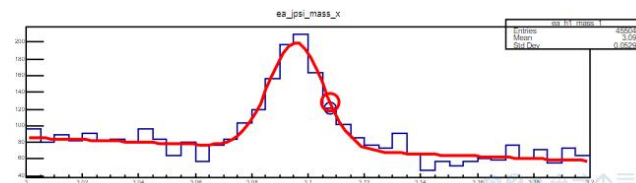
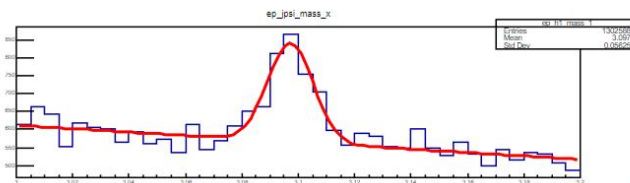
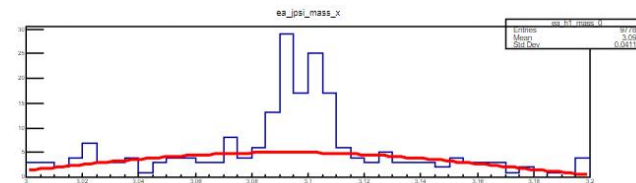
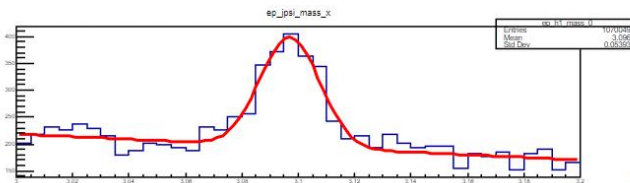
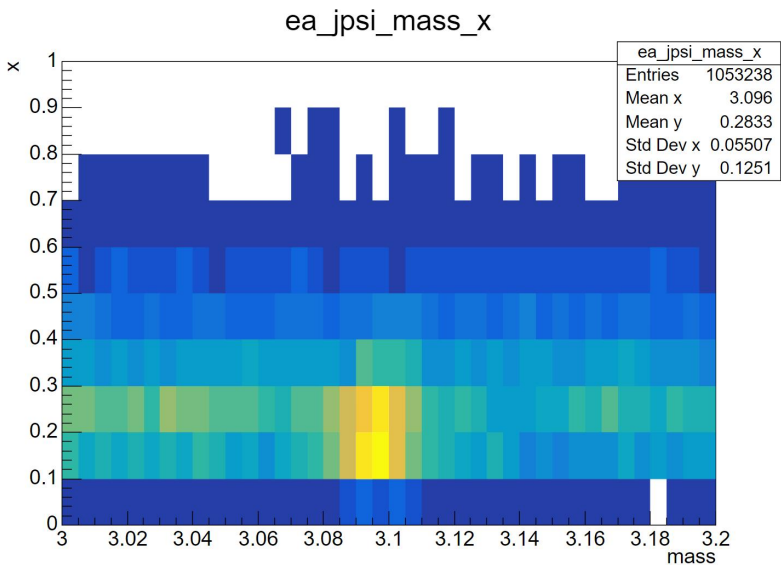
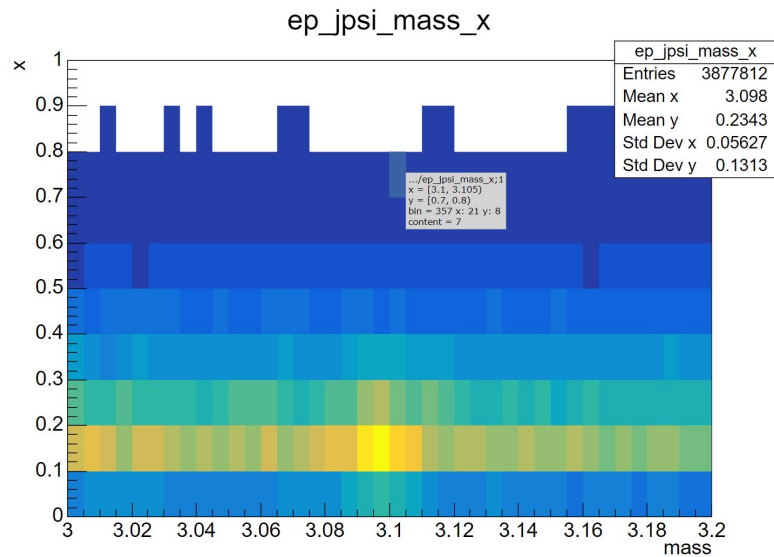


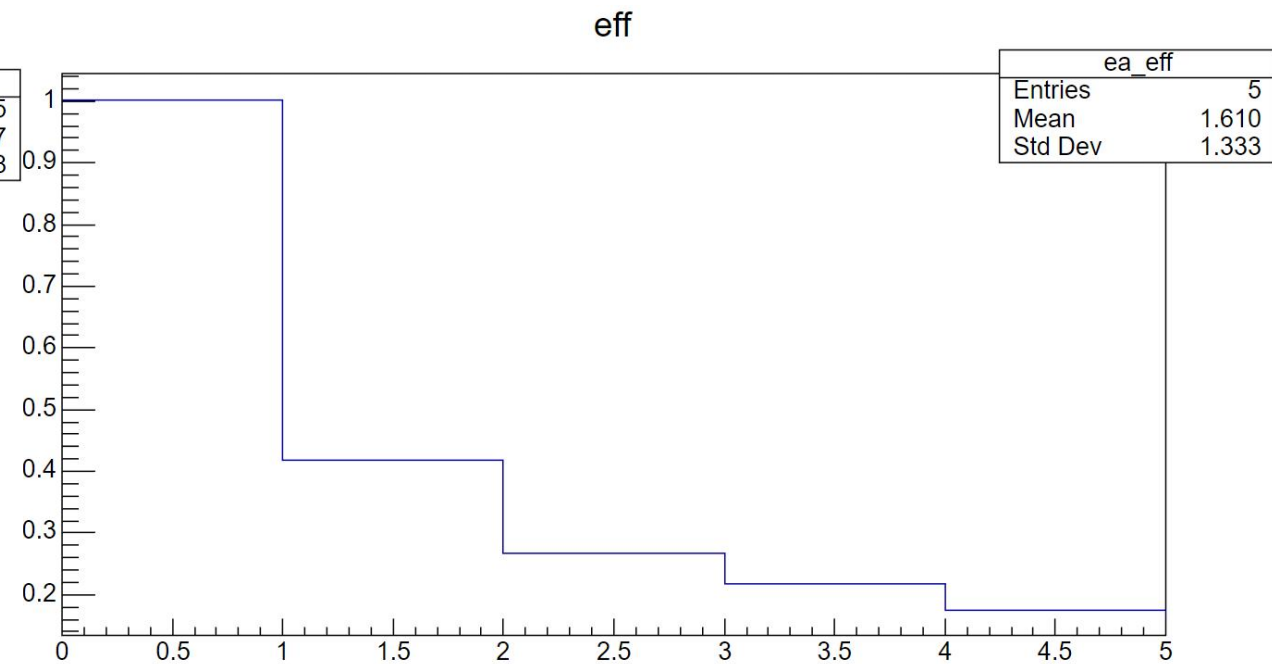
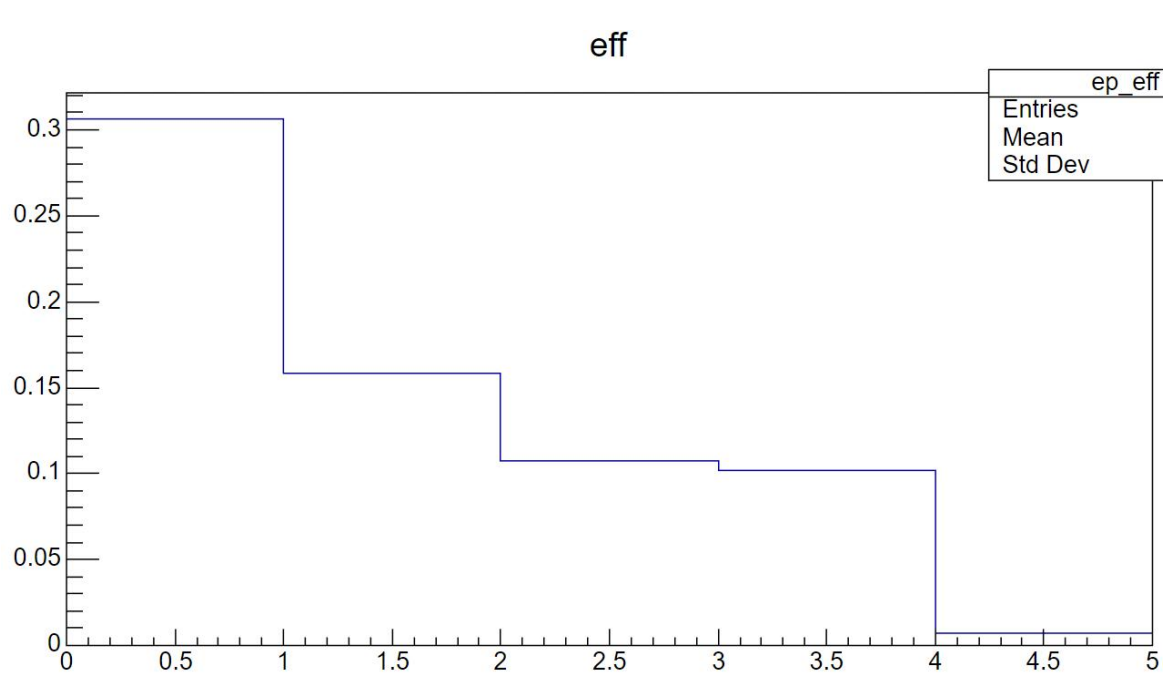
EicC  $J/\psi$   $p_T$  broadening

$$Q^2 > 10$$

## jpsi reconstruction in different x range

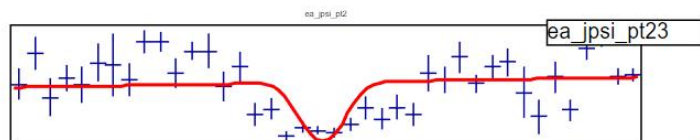
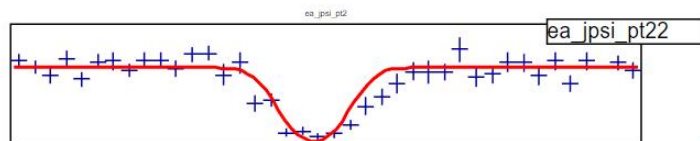
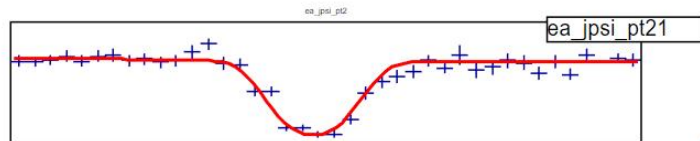
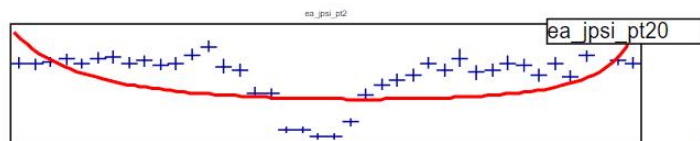
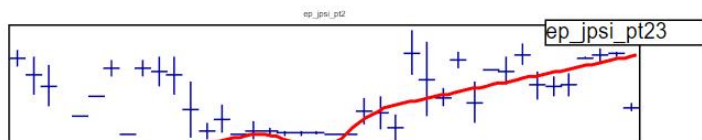
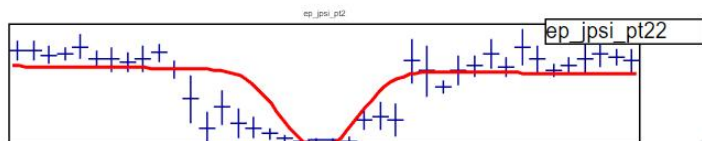
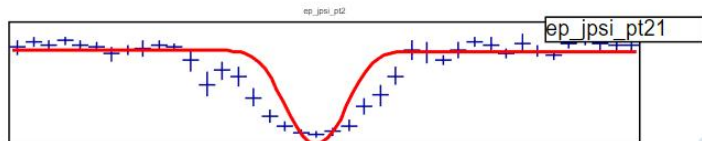
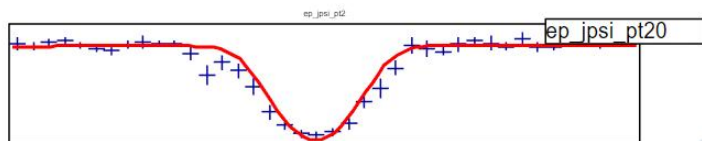


$$\text{eff} = 3\sigma \text{ 内的 } \frac{\text{signal}}{\text{total}}$$



```
background parameters: -0.483821 -0.784529
background parameters: 509.435 -141.144
background parameters: 675.982 -186.722
background parameters: 148.043 -27.4465
background parameters: 43.9412 -3.80016
```

```
n_signal += ep_h1_mass->GetBinContent(j)-f1_bkg.Eval(ep_h1_mass->GetBinCenter(j));
n_total += ep_h1_mass->GetBinContent(j);
```



ea fit parameters:	ep fit parameters:
20.4982	0.959082
-60.8984	12.5273
6.98961	-10.8662
ea fit parameters:	ep fit parameters:
-2.88003	-2.53936
23.8314	24.3464
-2.10089	-32.6919
ea fit parameters:	ep fit parameters:
-0.218075	-8.47352
16.6996	41.3092
-11.3414	-48.5245
ea fit parameters:	ep fit parameters:
11.0991	160.091
-20.6446	-492.457
-15.7964	-25.1076

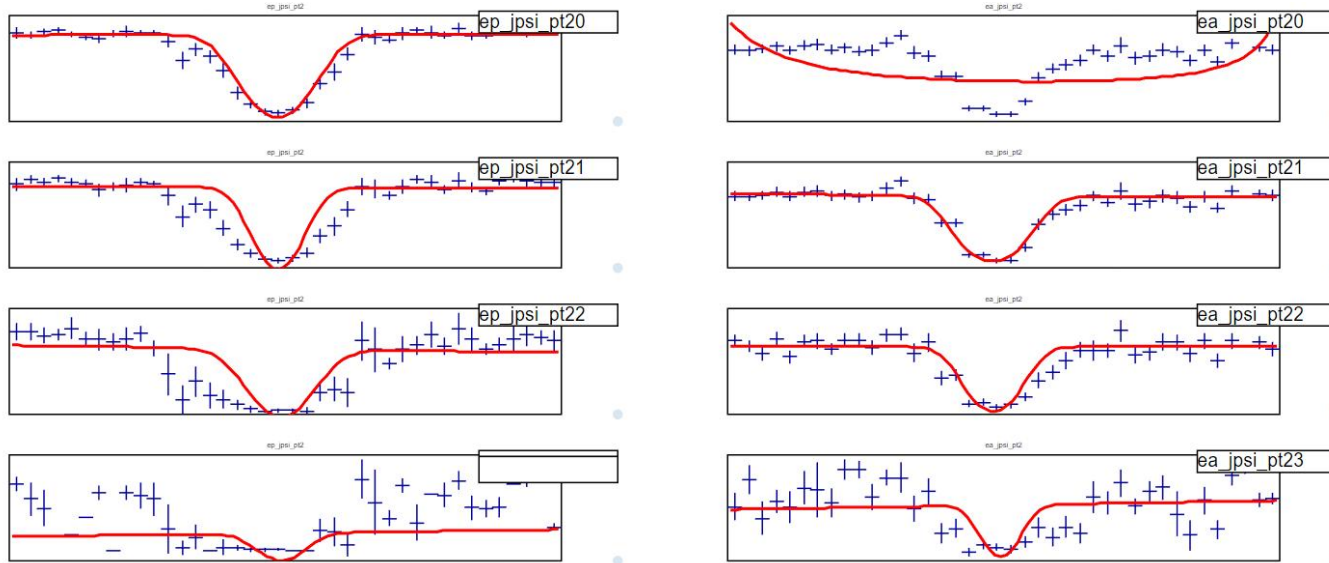
```
double ep_func_pt2_mass(double *x, double *par) {
    double mass = x[0];
    double count_signal = f1_signal->Eval(mass);
    double count_total = f1_total->Eval(mass);
    double s2t = count_signal / count_total;

    double pt2_background = par[0] * mass + par[1];
    double pt2_signal = par[2];
    double pt2_all = s2t * pt2_signal + (1 - s2t) * pt2_background;

    return pt2_all;
}
```

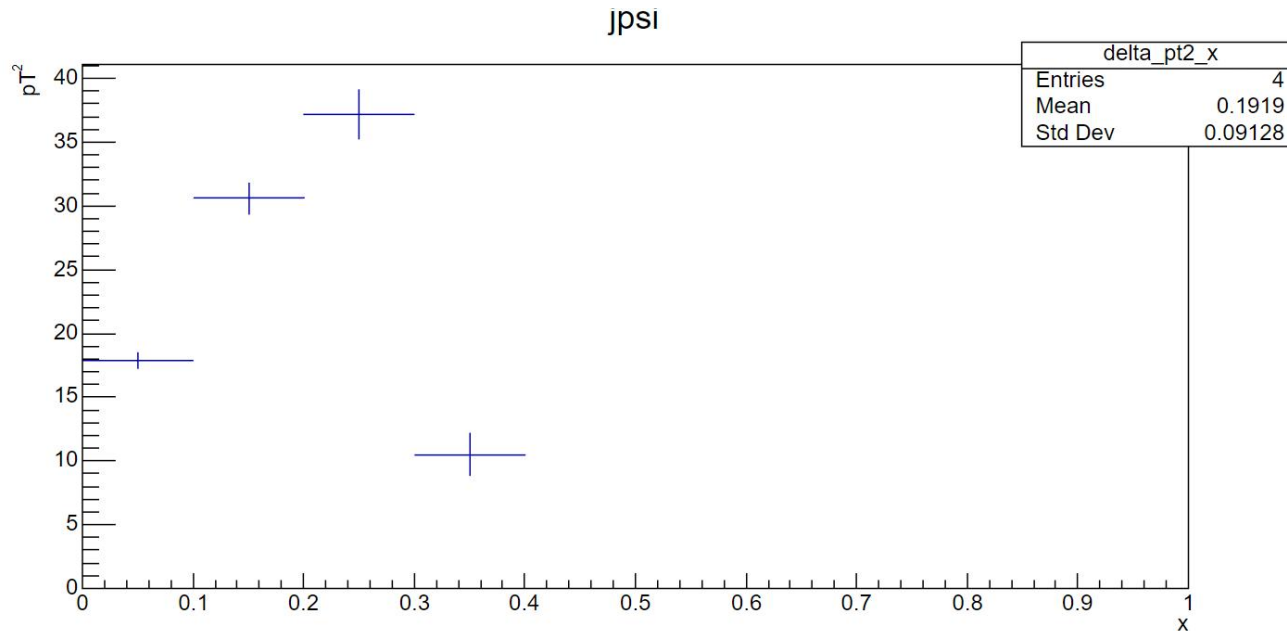
拟合出来的pt2\_signal<0

## 修改初始参数和范围



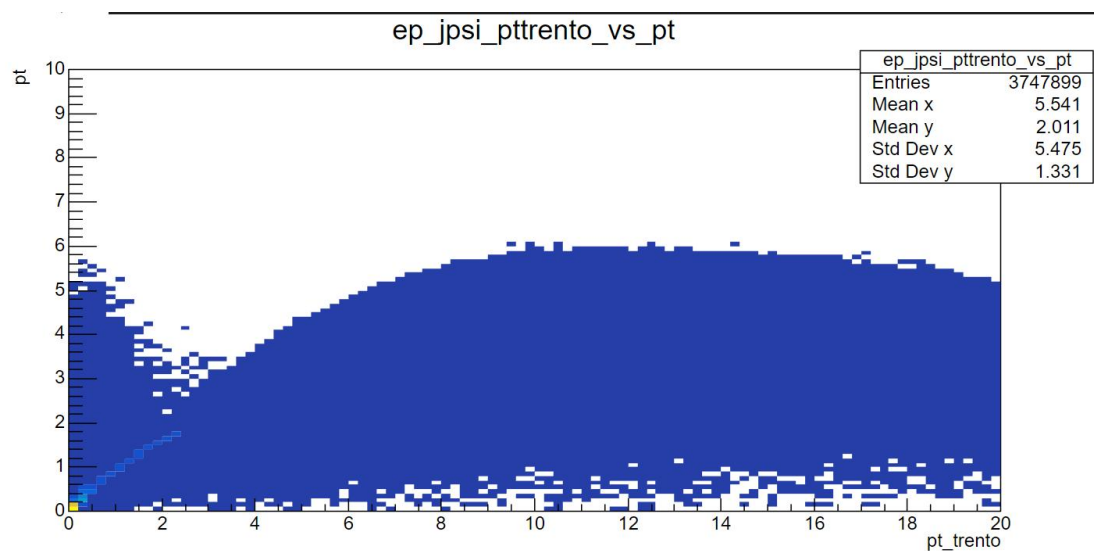
```

ea fit parameters:      ep fit parameters:
20.4982                 0.958864
-60.8984                12.5279
6.98961                 -10.8662
ea fit parameters:      ep fit parameters:
-2.88003                -2.53937
23.8314                 24.3465
-2.10089                -32.692
ea fit parameters:      ep fit parameters:
-0.218075               -8.47154
16.6996                 41.3032
-11.3414                -48.5255
ea fit parameters:      ep fit parameters:
11.0991                  10
-20.6446                -25.9385
-15.7964                -26.2838
    
```

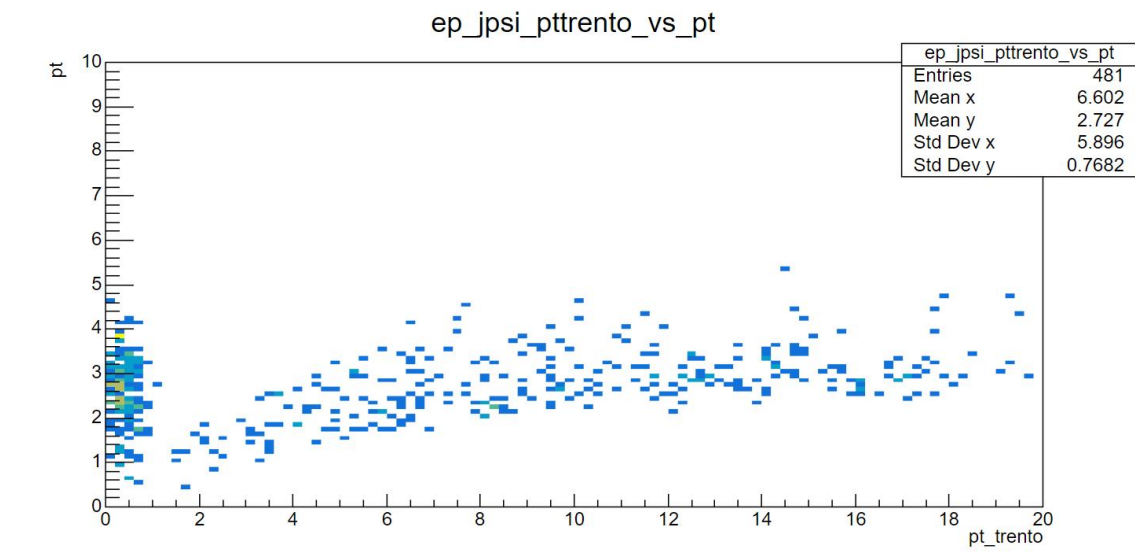


jpsi的delta pt<sup>2</sup>偏大

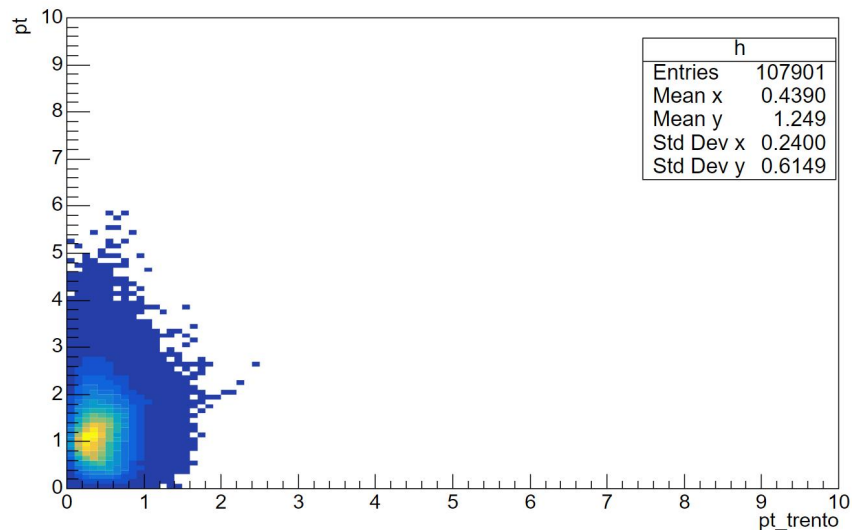
*background: mass  $\leq 3.096$  or mass  $\geq 3.097$*



*signal:  $3.096 < mass < 3.097$*

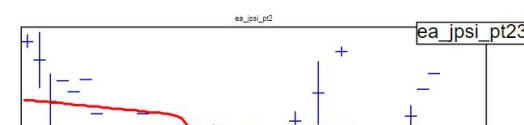
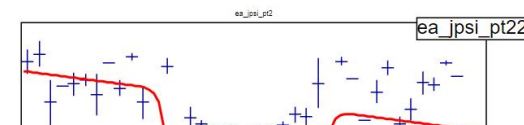
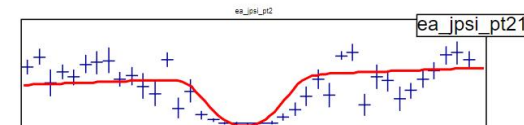
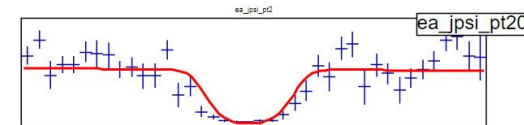
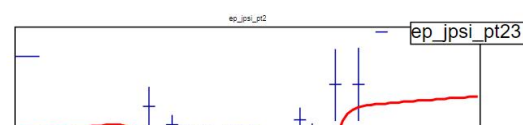
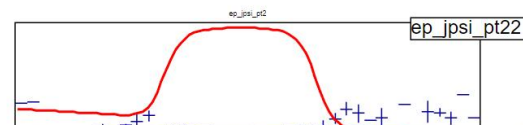
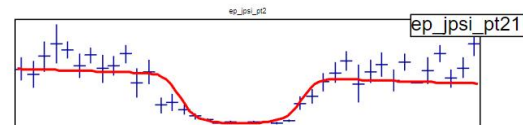
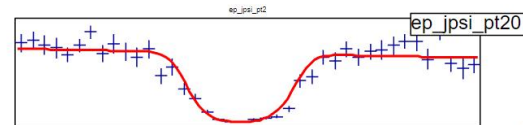
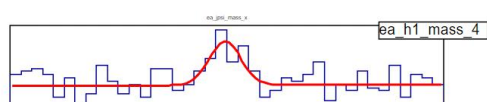
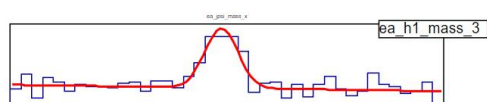
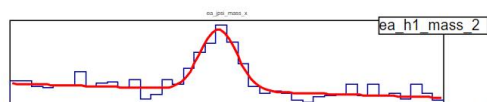
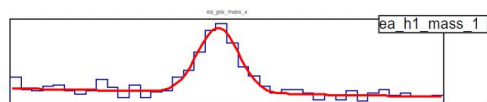
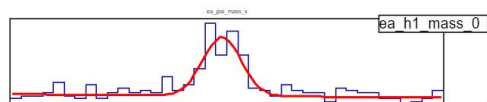
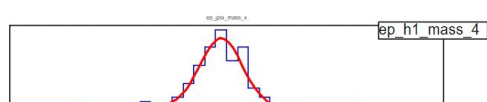
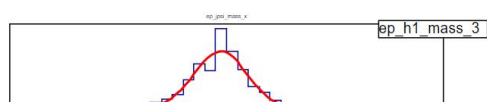
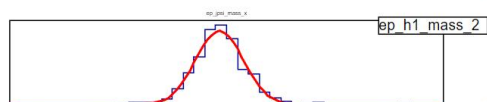
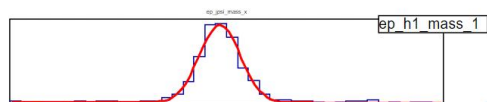
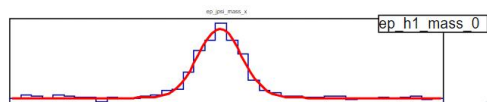


J/psi



check蒙卡产生的jpsi填的pt vs pt in trento

# pt\_trento < 2GeV



```
ea fit parameters:  ep fit parameters:  
-0.279237          -1.12261  
2.57782           5.46679  
-0.032071         0.135923  
ea fit parameters:  ep fit parameters:  
2.97295           -2.37992  
-7.38441          9.09406  
-0.429643         0.191573  
ea fit parameters:  ep fit parameters:  
-10.6254          -13.0555  
34.0148           41.41  
-4300.12          10  
ea fit parameters:  ep fit parameters:  
-6.52914          6.35649  
20.6693           -18.9054  
-74.8876          -10
```