

update

2021.1.15

- In general, no progress, only problem
- 1.the problem in energyw last time
- 2.about Fisher information

1.对LS+ISR改变能量宽度

- when energyw=0.5, at 346.396 there must be that problem
- The problem is not in the loop, but in the integration

```

NIntegrate[
  ModifiedLuminosityFunction[t, beta]*
  (1 / energyw / 2 / Sqrt[ 3.1415926 ] * Exp[ -(sqrts-ss)*(sqrts-ss) / 2 / energyw / energyw ] )*
  TTbarXSection[
    Sqrt[1-t^(1/beta)] * sqrts, {mu, muWidth}, {mtPS, width}, order,
    ISRConst -> True
  ],
  {ss, 330, 370},
  {t, 0, tmax}

```

$$\frac{1}{2 * \text{energyw} * \sqrt{\pi}} e^{-\frac{(\text{sqrts}-\text{ss})^2}{2\text{energyw}^2}}$$

* ModifiedLuminosityFunction[t, beta]

* TTbarXSection[$\sqrt{1 - t^{\frac{1}{\text{beta}}}}$ * sqrts,

{mu, muWidth}, {mtPS, width}, order, ISRConst → True

2. Fisher Information

- I haven't solved the problem of luminosity spectrum yet so I did not draw them
- But for ISR and without ISR there are still bugs waiting for me to fix.

