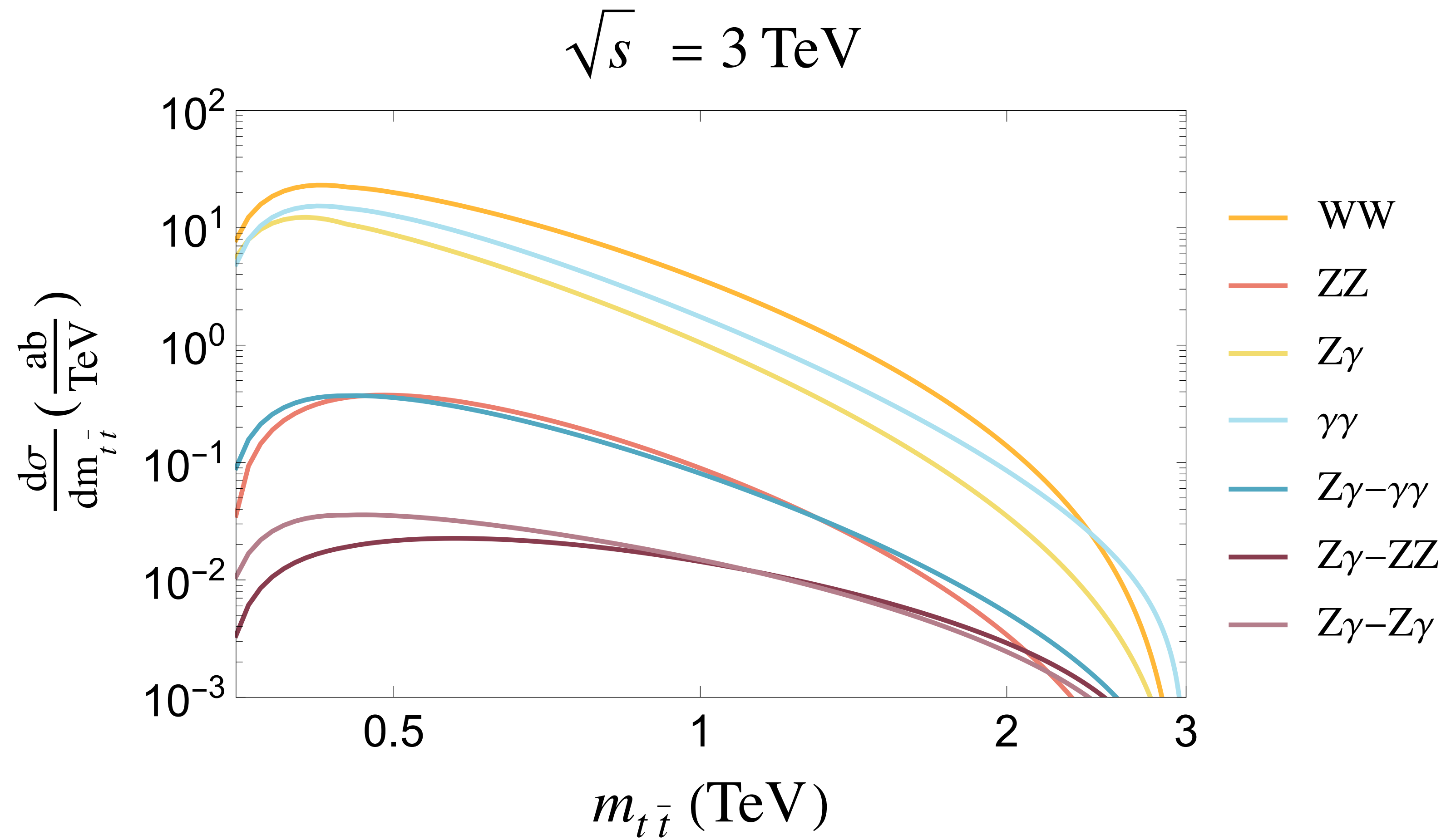
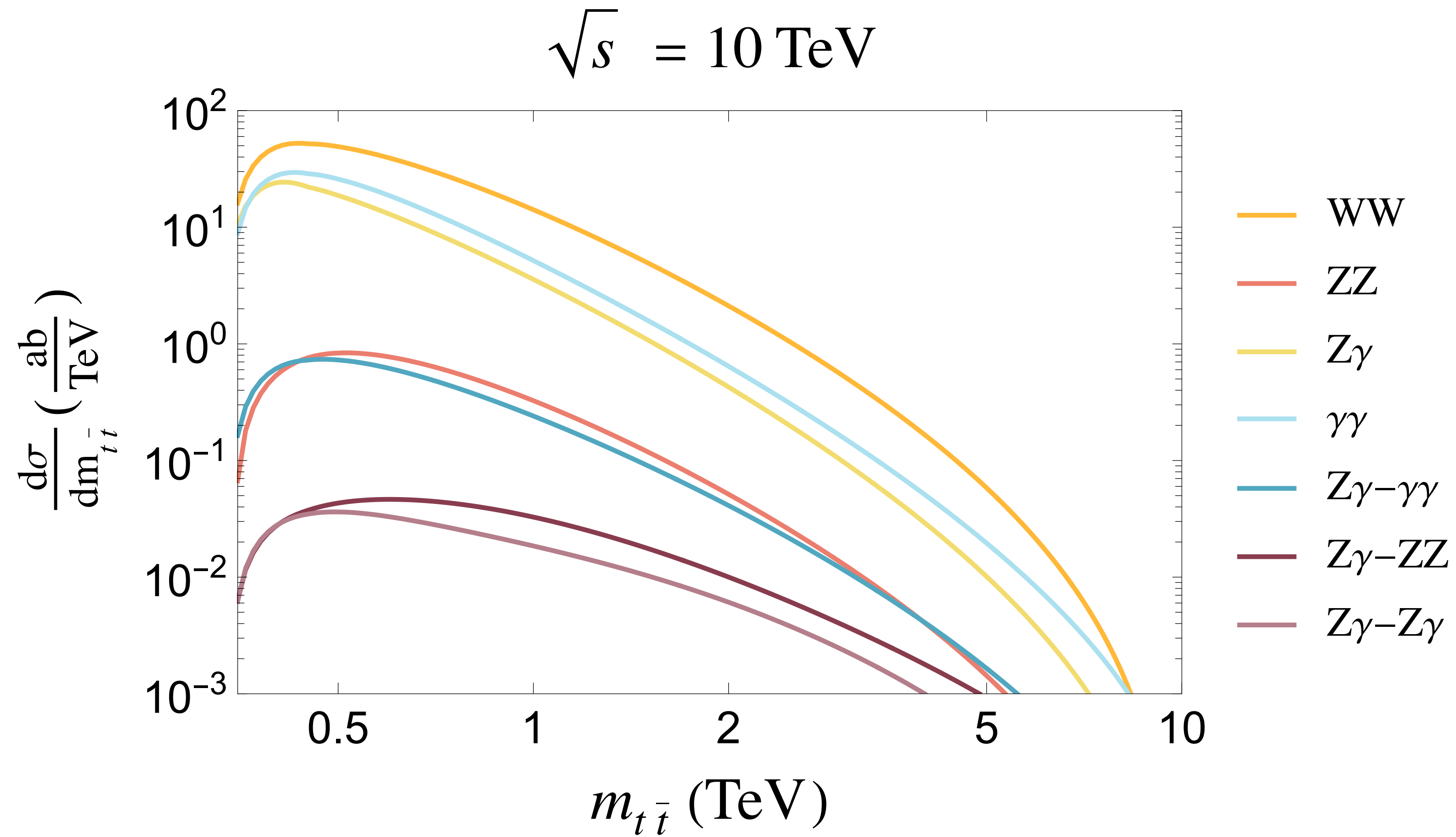


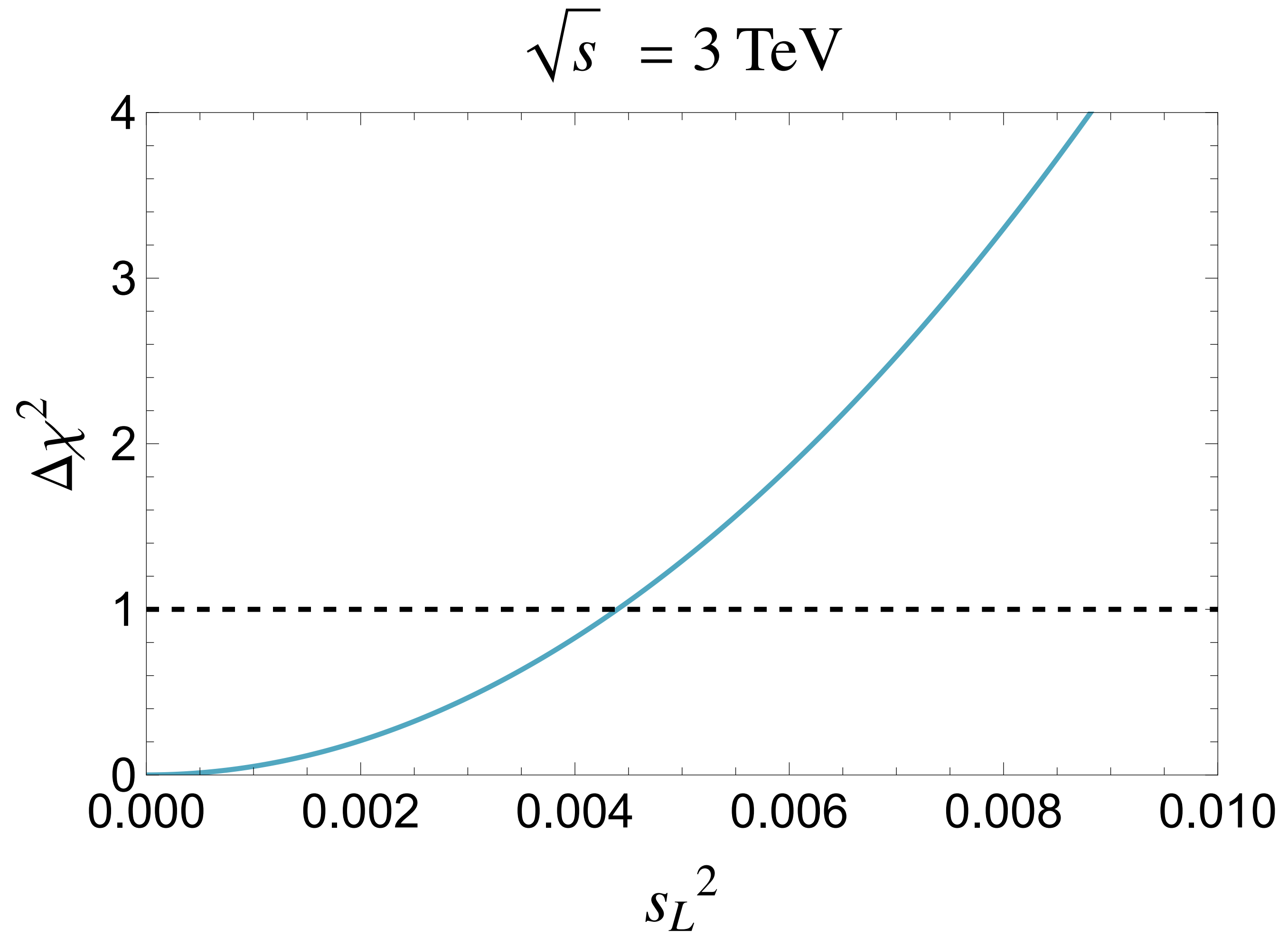
# Interference terms included for 3 TeV and 1 $ab^{-1}$ Collider



# Interference terms included for 10 TeV and 10 $ab^{-1}$ Collider

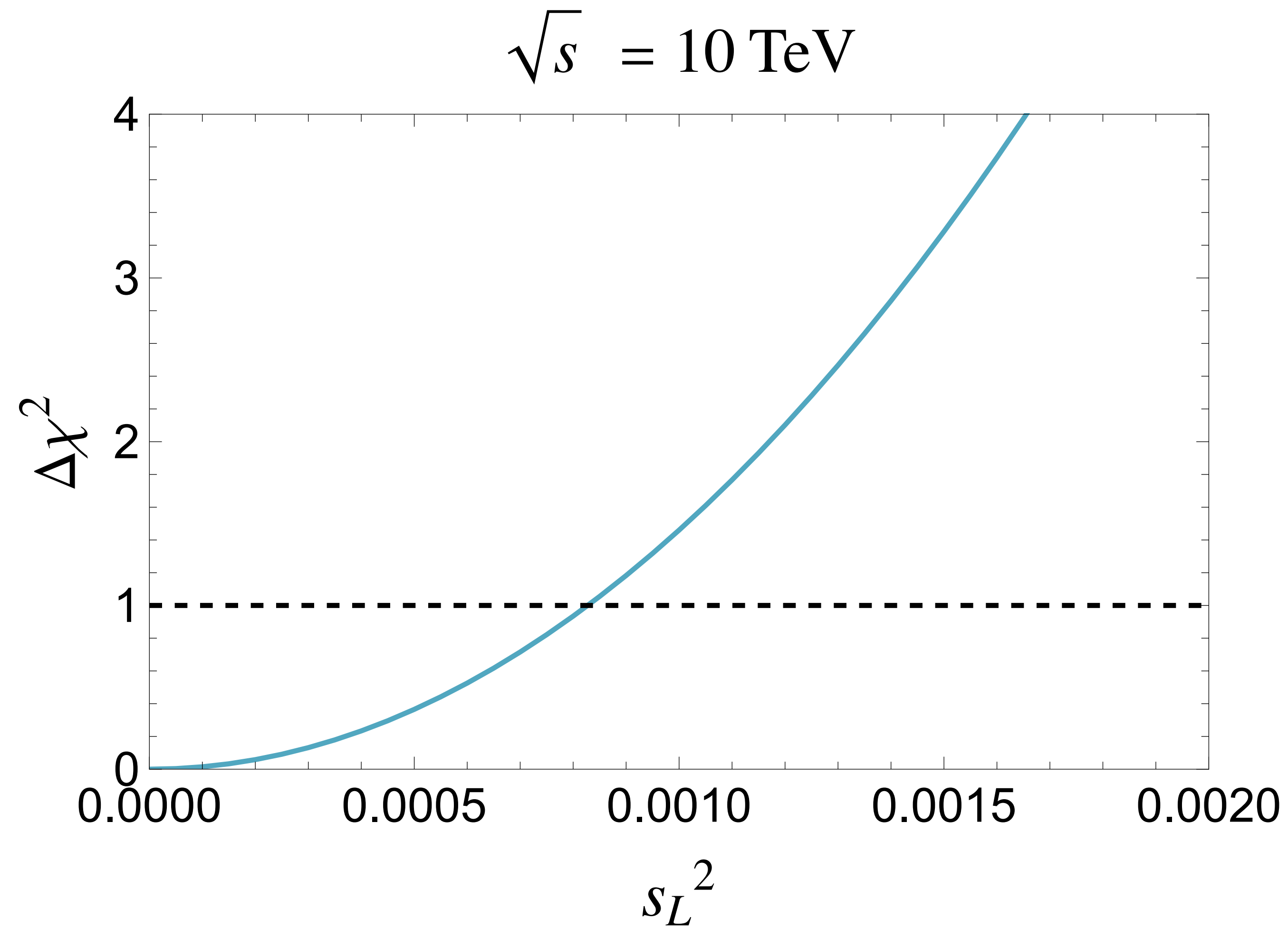


$s_L^2$  bound for 3 TeV and 1  $ab^{-1}$  Collider



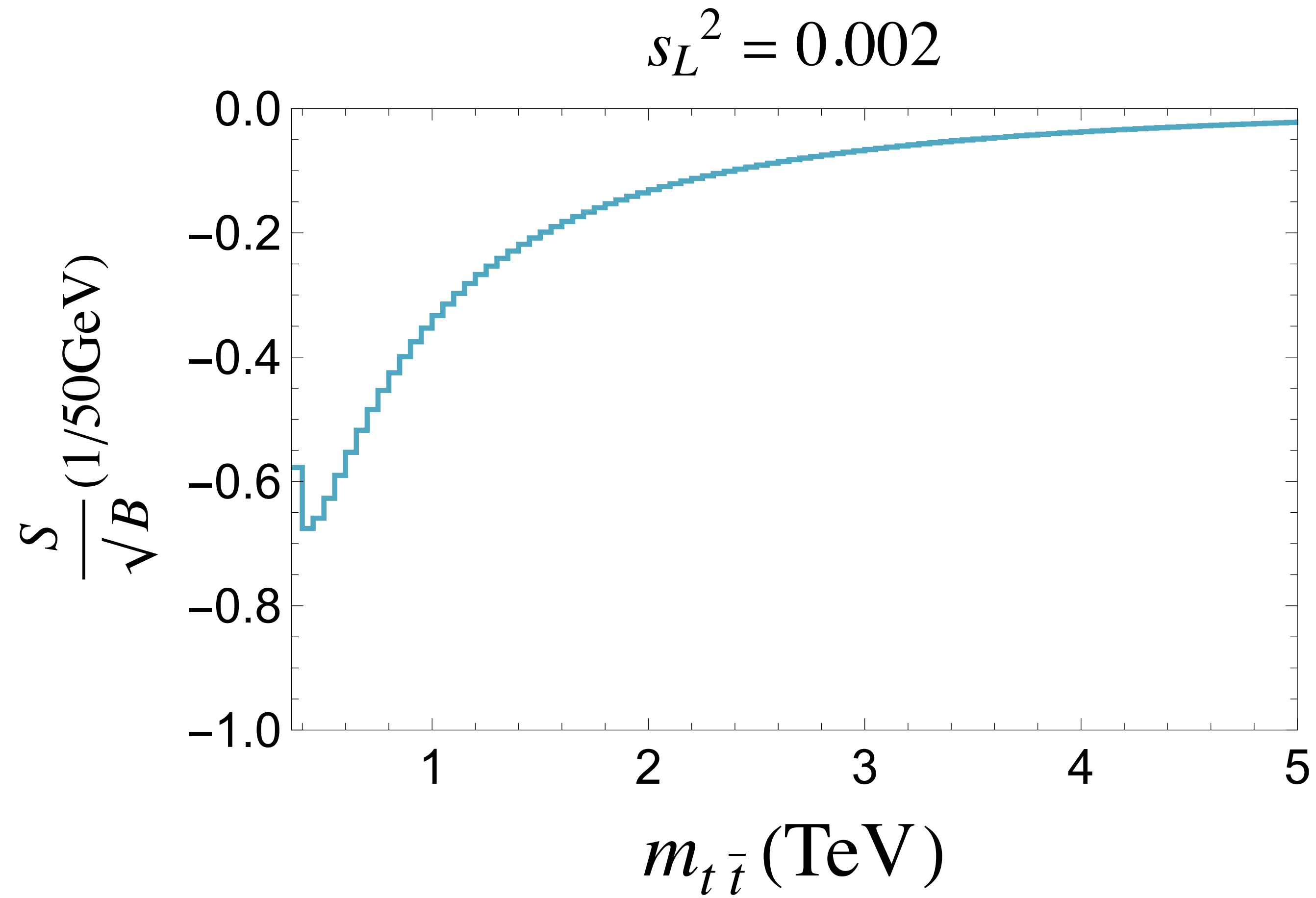
$1\sigma$  bound is less than 0.5% on  $s_L^2$  after including all channels for 3 TeV collider

$s_L^2$  bound for 10 TeV and 10  $ab^{-1}$  Collider



$1\sigma$  bound is less than 0.1% on  $s_L^2$  after including all channels

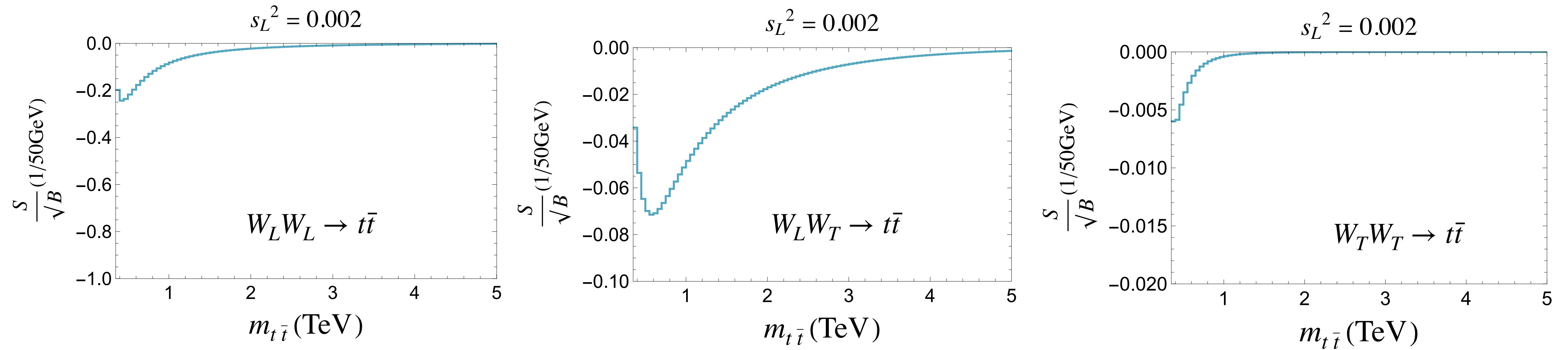
# Signal Significance from all channels for 10 TeV collider



The figure sums contributions from all channels

# Signal Significance in Various Channels for 10 TeV collider

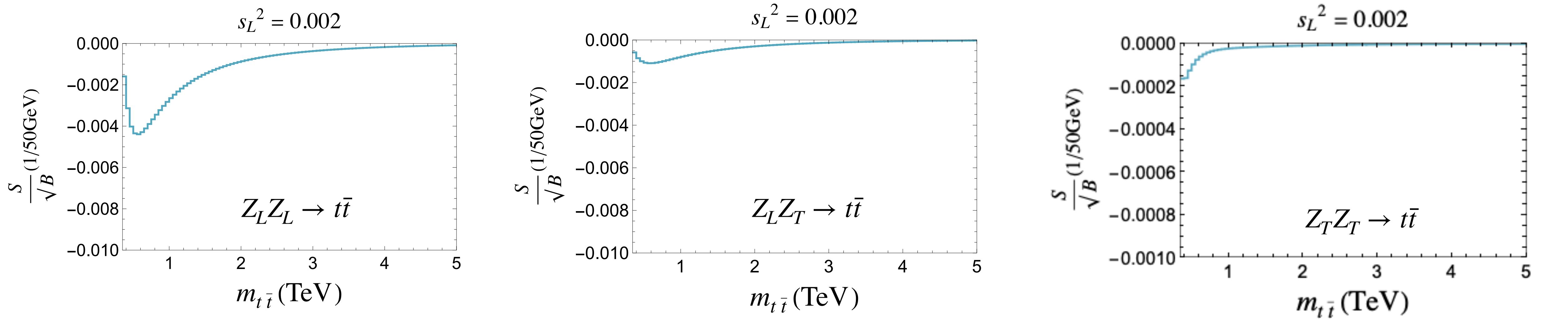
## WWtt Channel



The largest overall contribution comes from  $W_L W_L \rightarrow t\bar{t}$

Signal Significance in Various Channels for 10 TeV collider

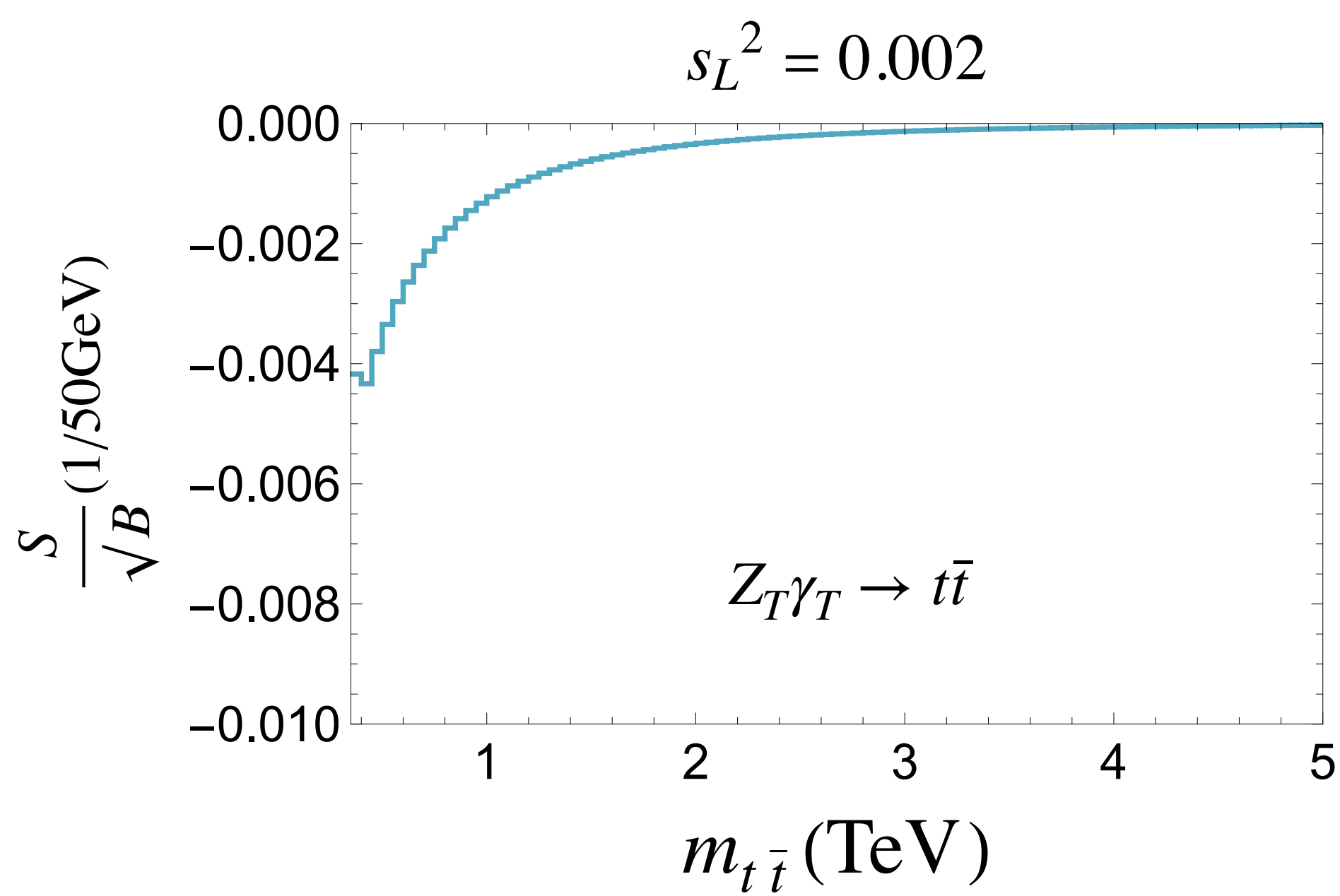
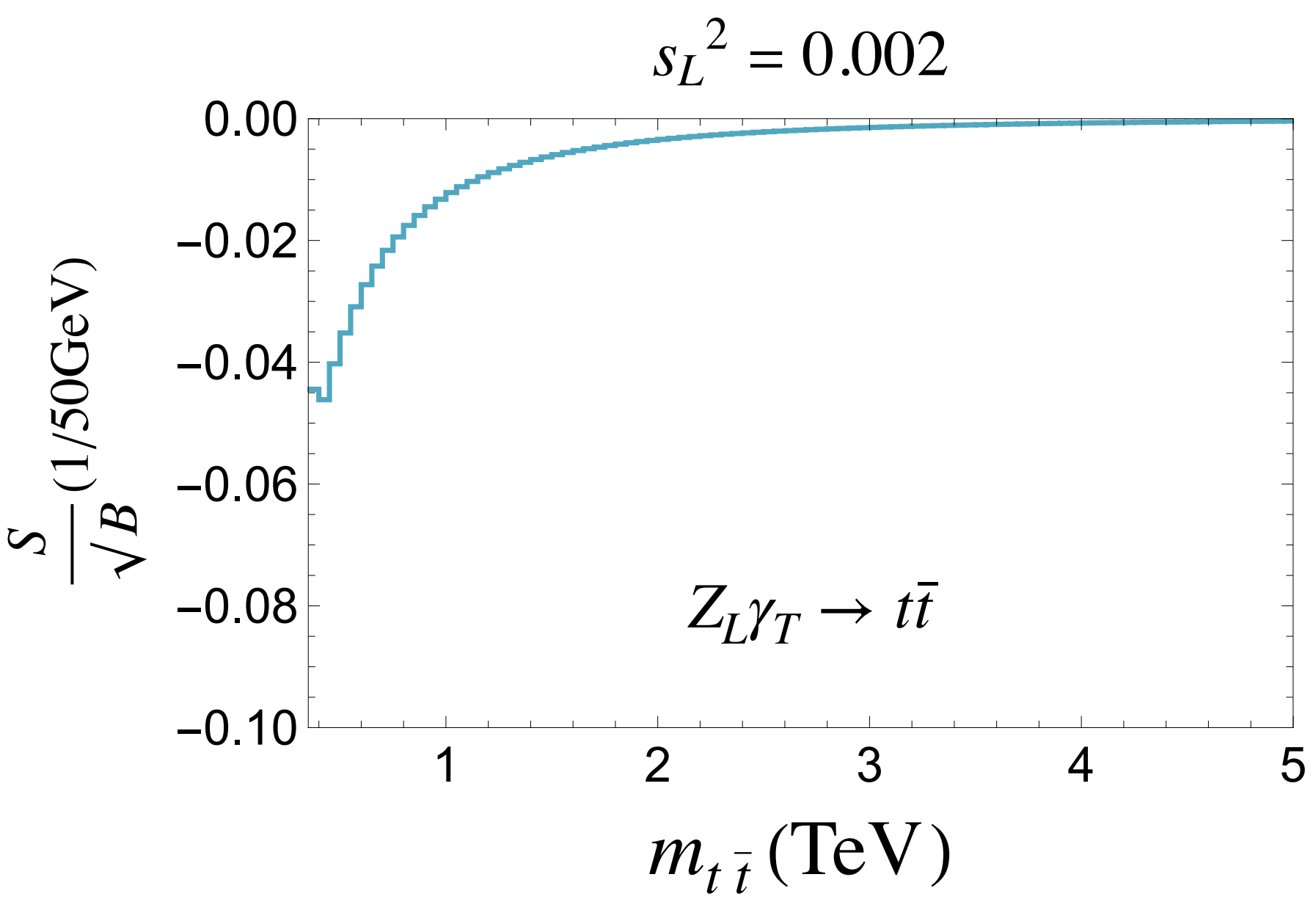
ZZtt Channel



Minimal contribution to overall significance from this channel

Signal Significance in Various Channels for 10 TeV collider

Zγtt Channel

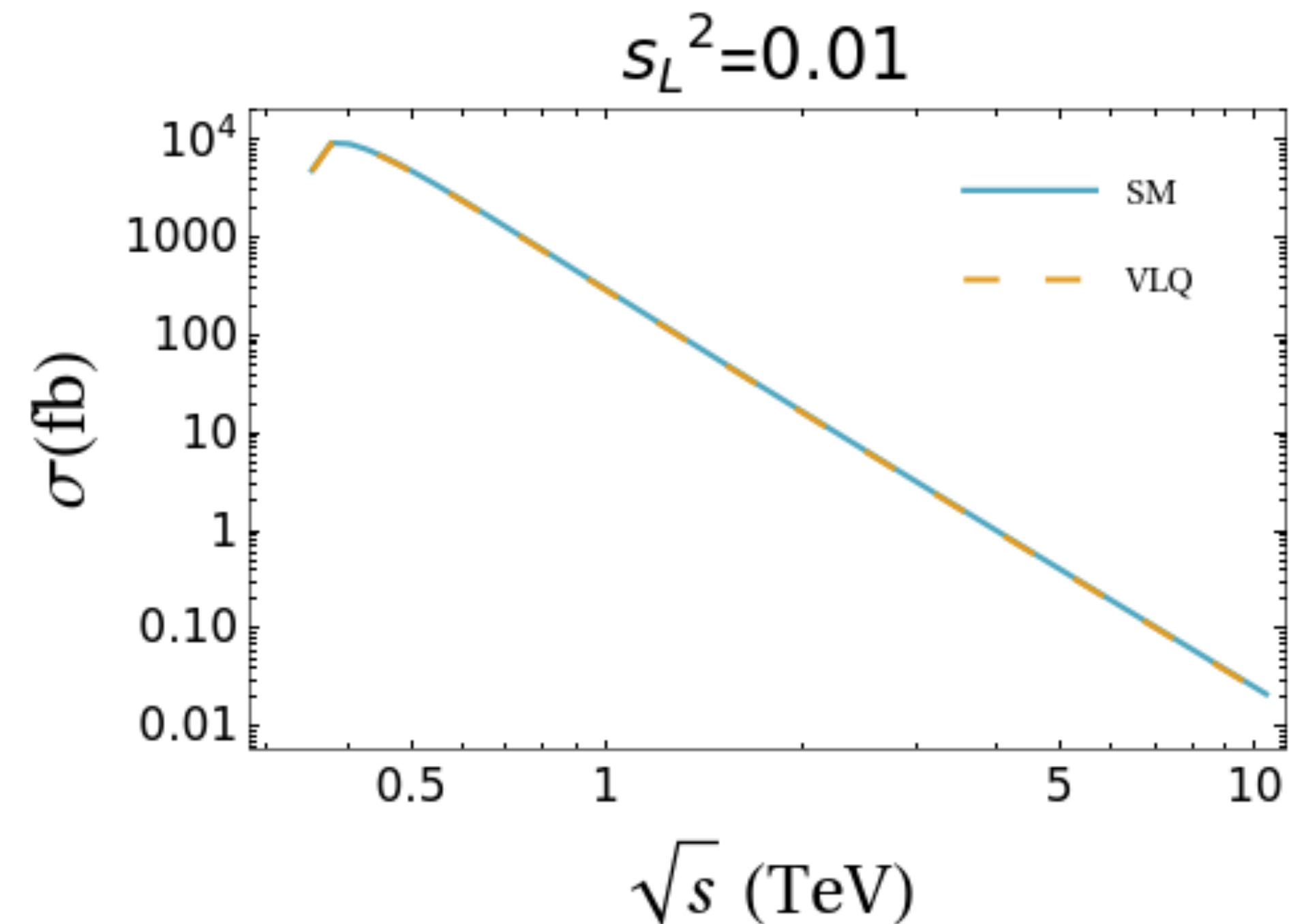
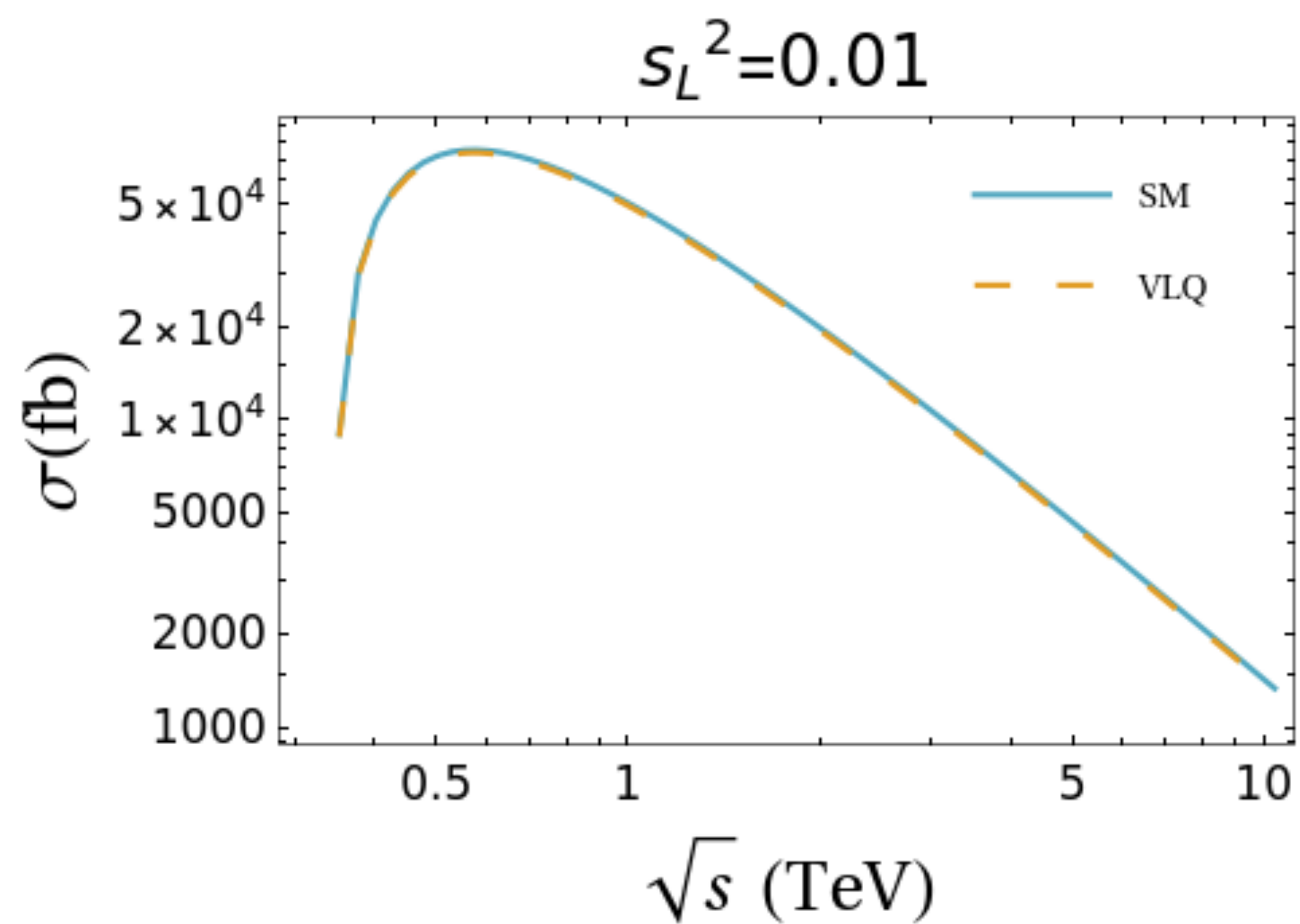
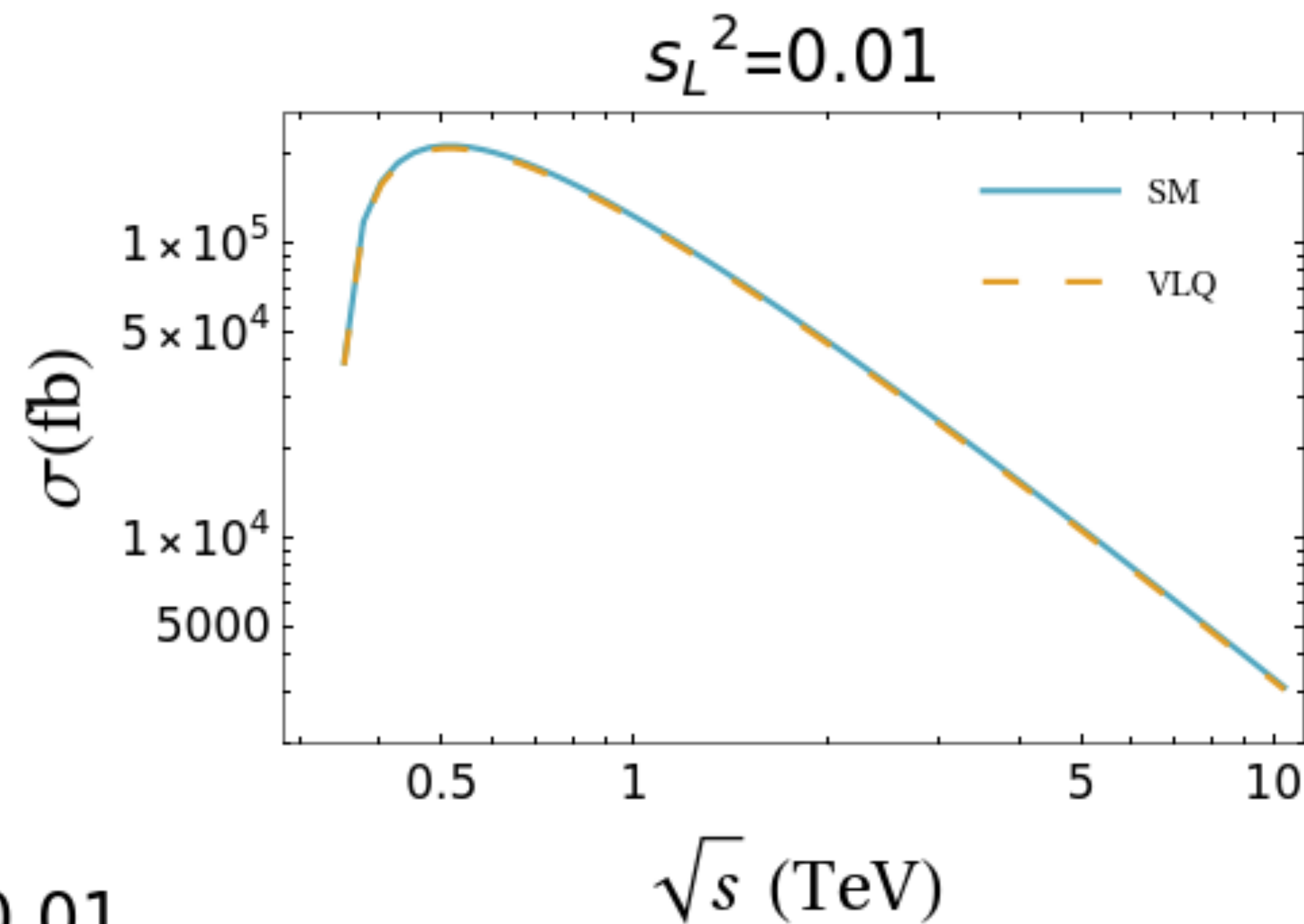


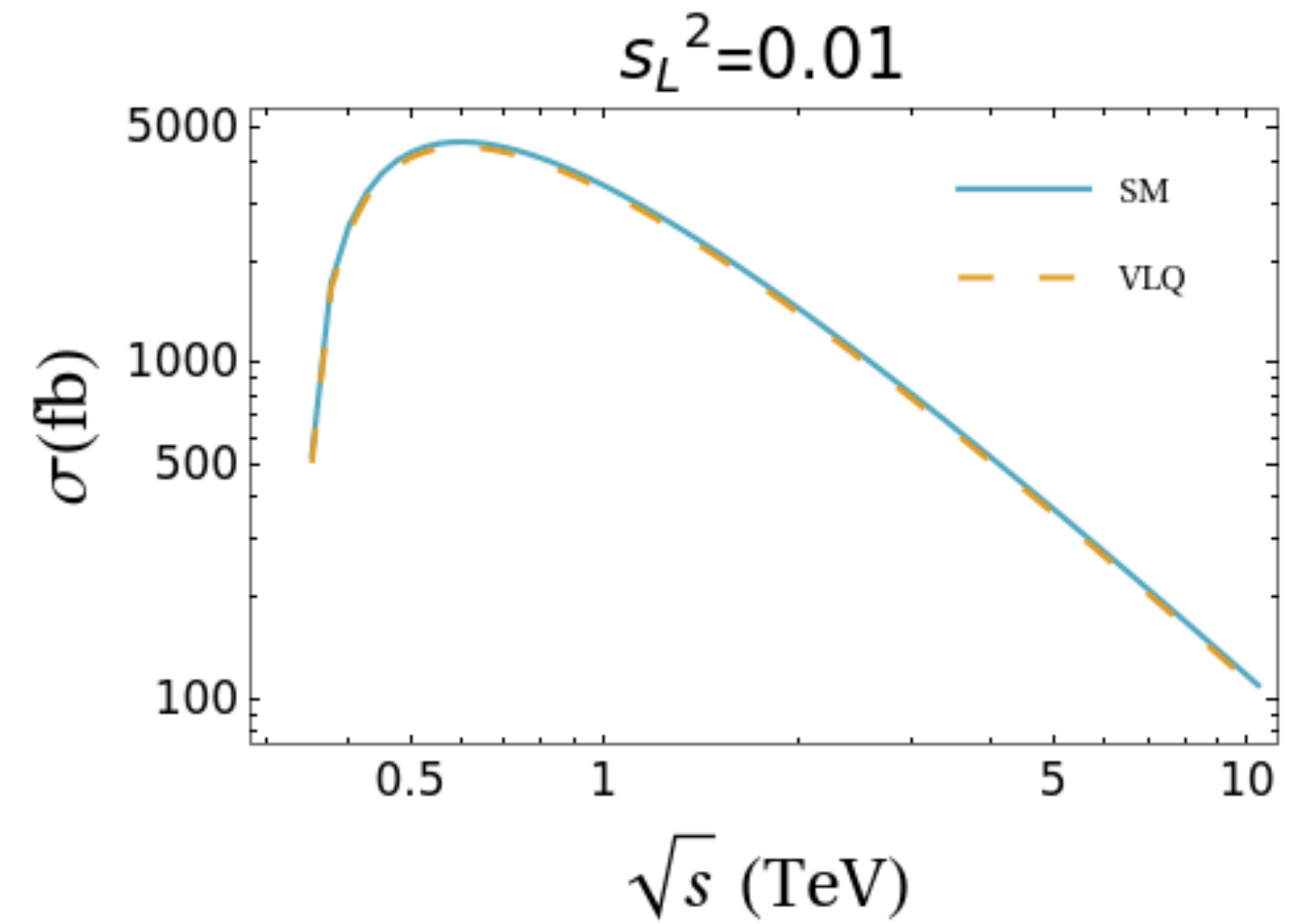
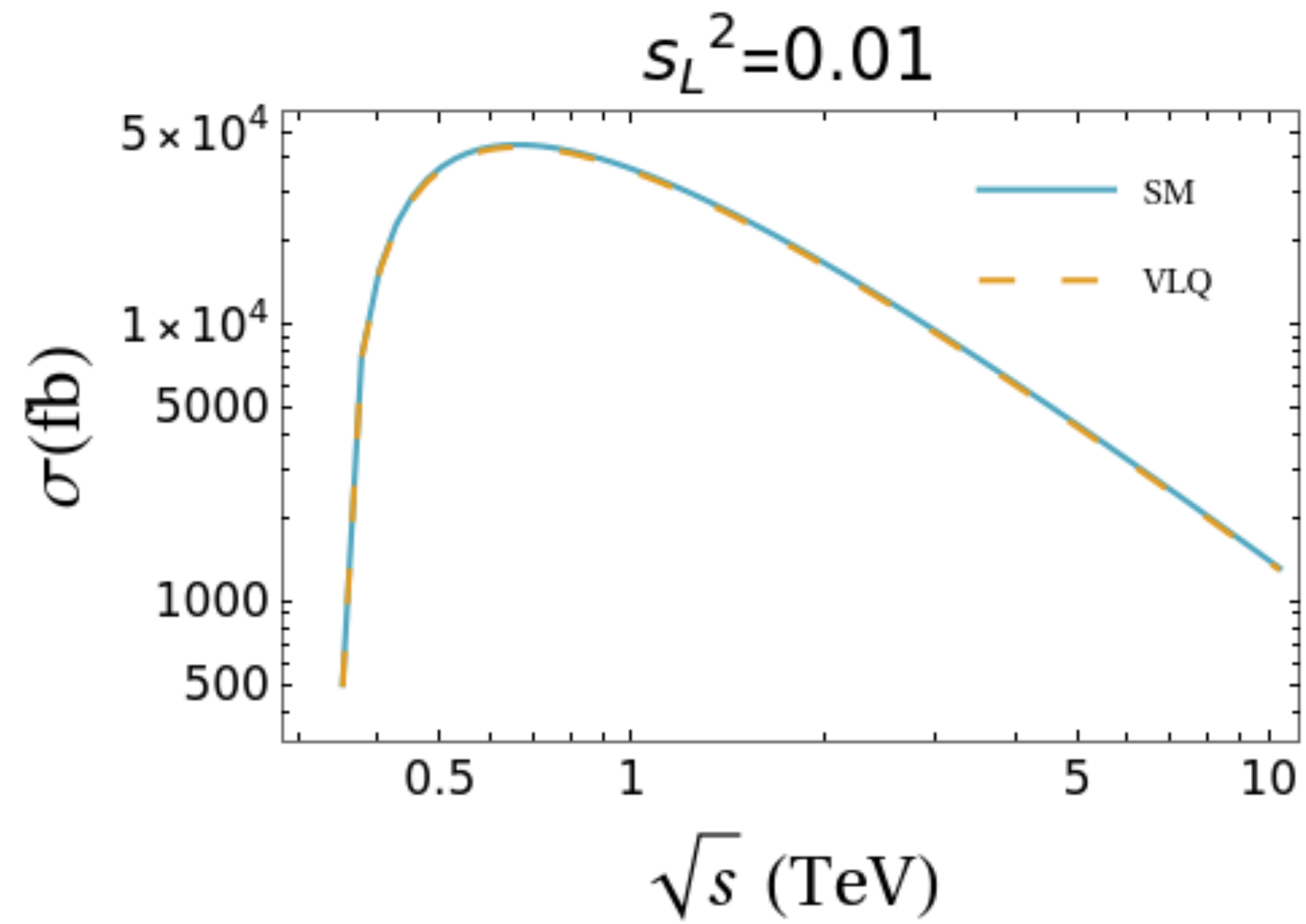
The conclusion seems to be almost all significance comes from WWtt channel



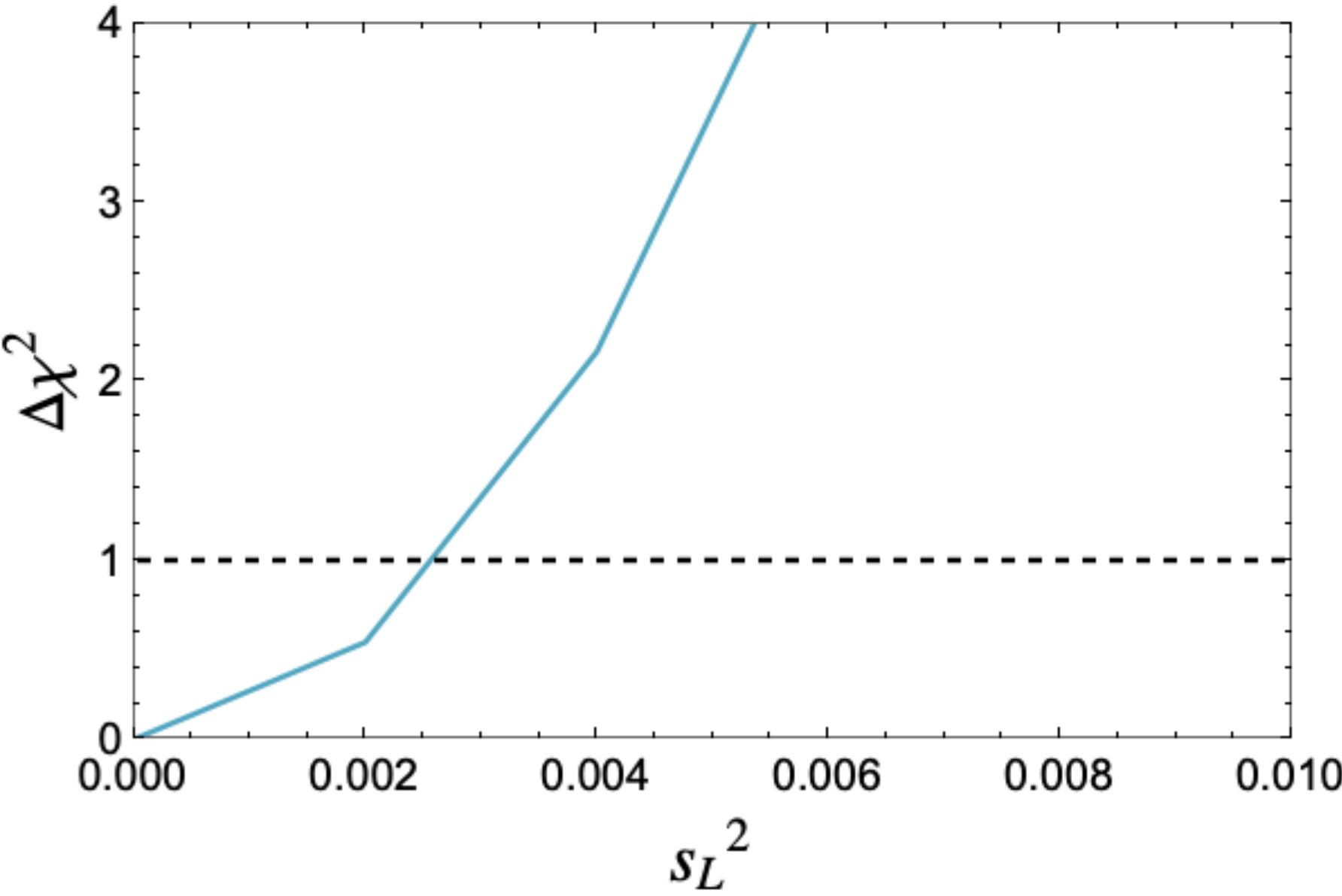
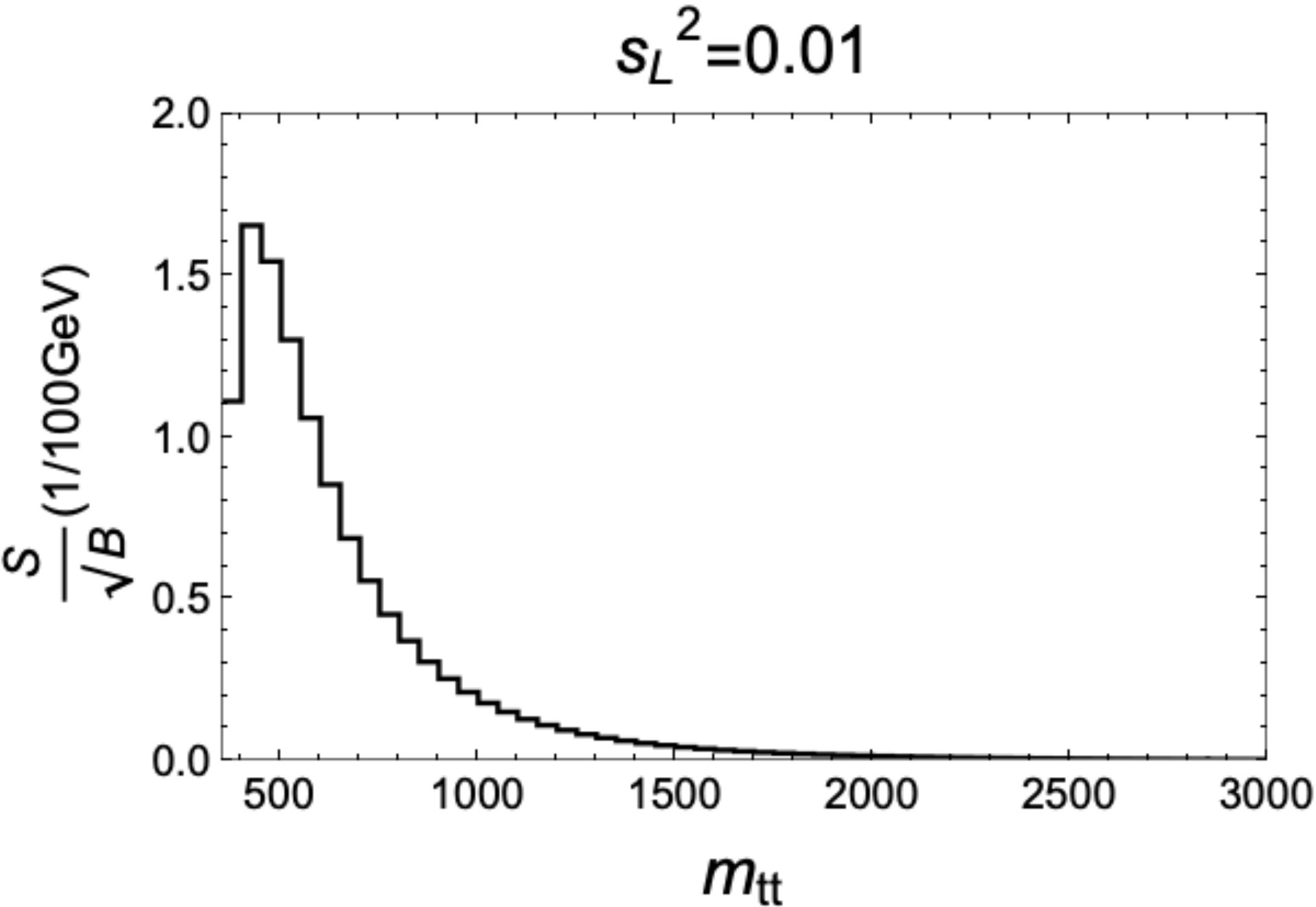
## Analysis With VLQ Model

## Partonic Distribution for a few selected polarization of WW





Chi-Square Results



# The parameter space for the VLQ model

