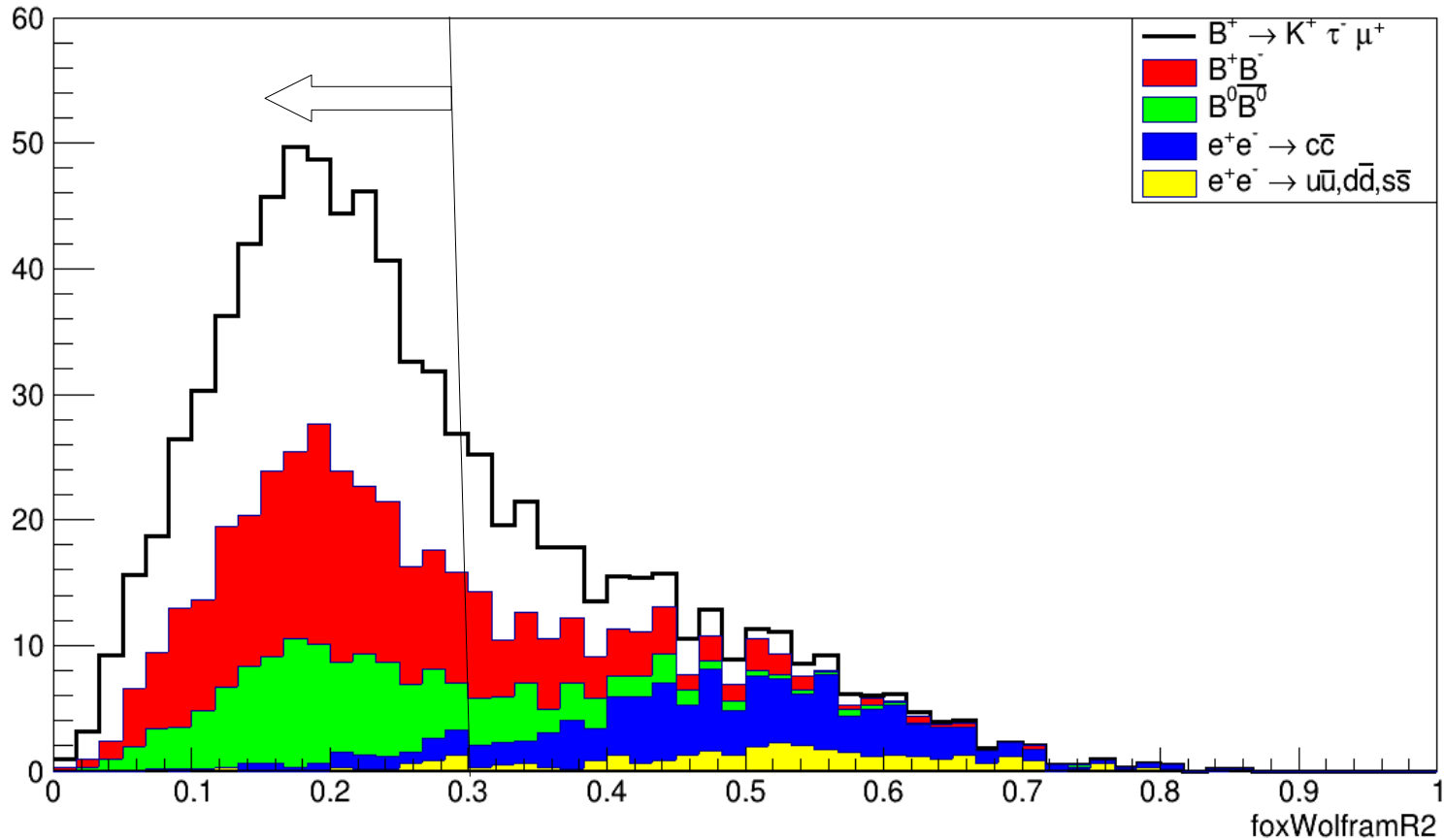


# Update

03/09/2024

# FoxWolframR2



# FoxWolframR2

- Before R2 cut

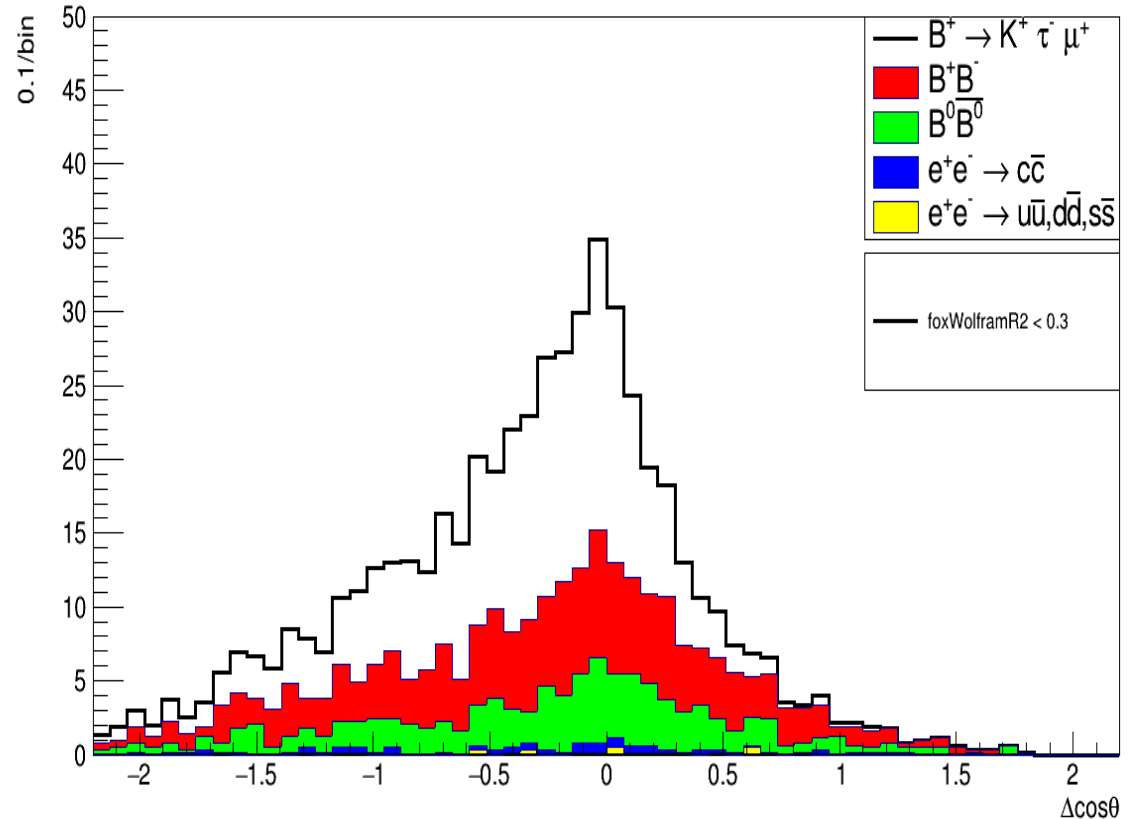
$$N_{\text{sig}} = 3401$$

$$N_{\text{B.G}} = 3025$$

- After  $R2 < 0.3$  cut

$$N_{\text{sig}} = 2684$$

$$N_{\text{B.G}} = 1755$$



# Q<sub>total</sub>

- Before  $Q_{\text{total}} = 0$  cut

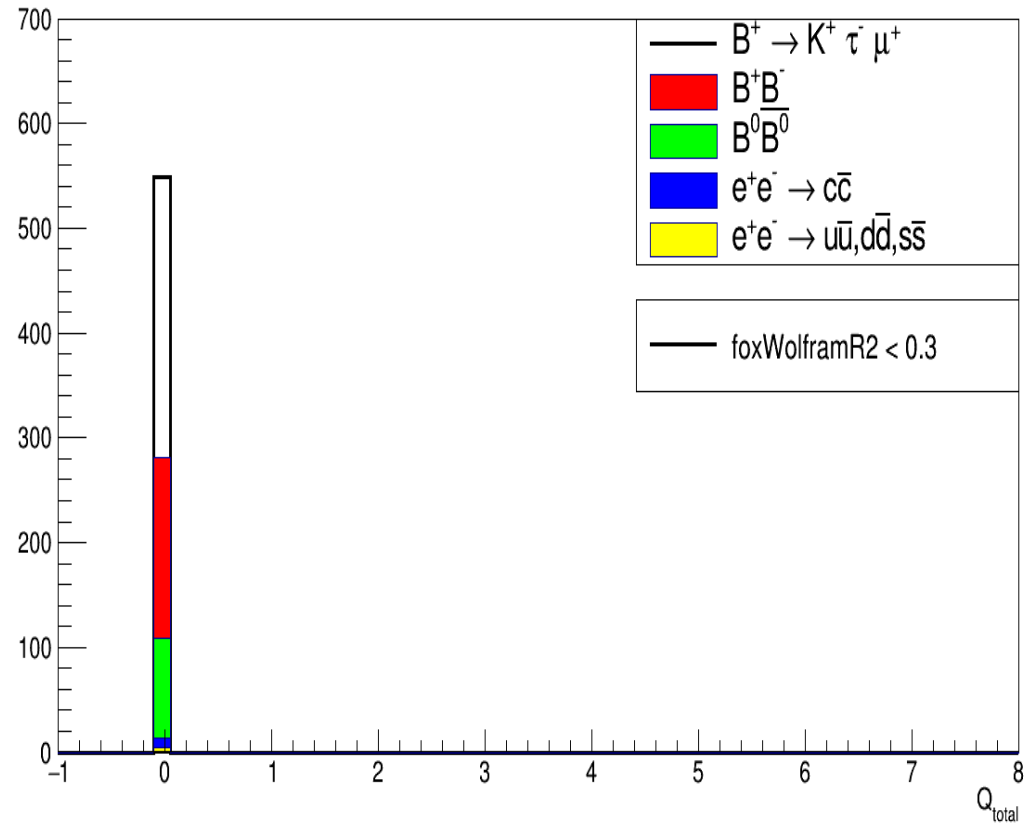
$$N_{\text{sig}} = 2684$$

$$N_{\text{B.G}} = 1755$$

- After  $Q_{\text{total}} = 0$  cut

$$N_{\text{sig}} = 2684$$

$$N_{\text{B.G}} = 1755$$



# $Q_{\text{total}}$

- Before  $Q_{\text{total}} = 0$  cut

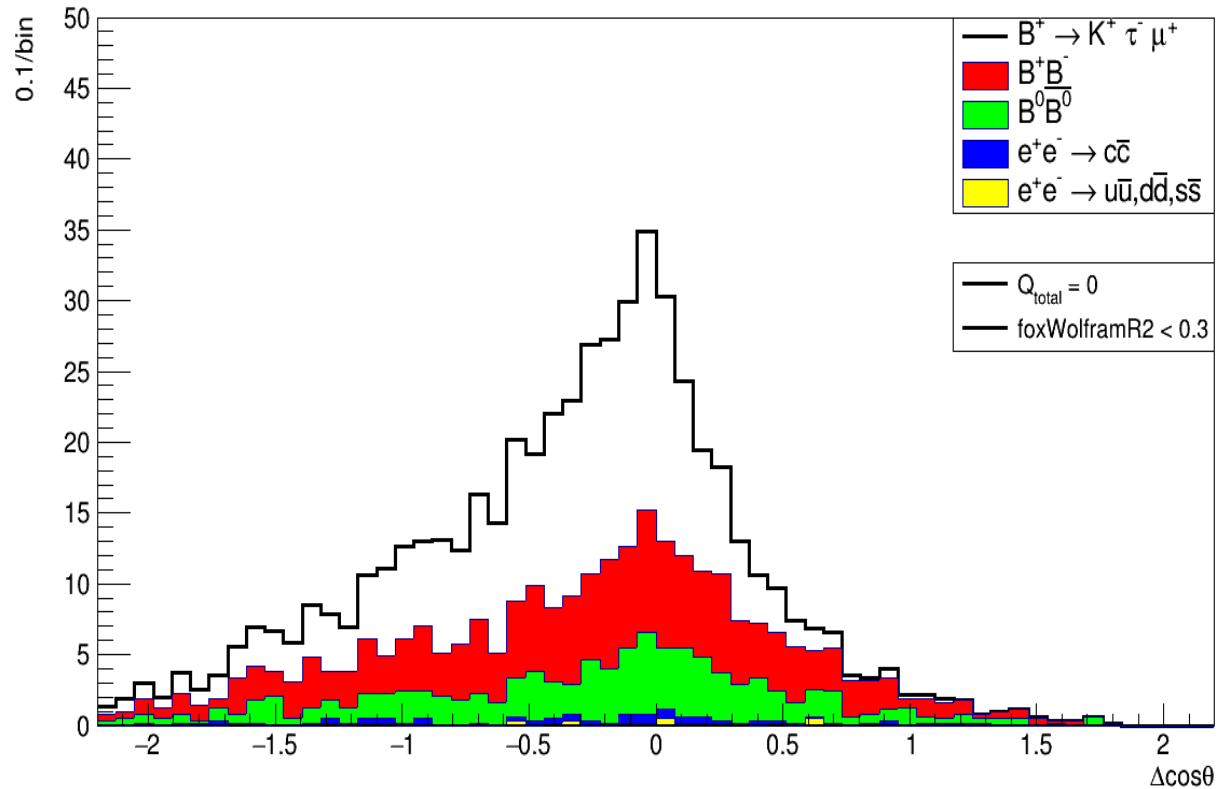
$$N_{\text{sig}} = 2684$$

$$N_{\text{B.G}} = 1755$$

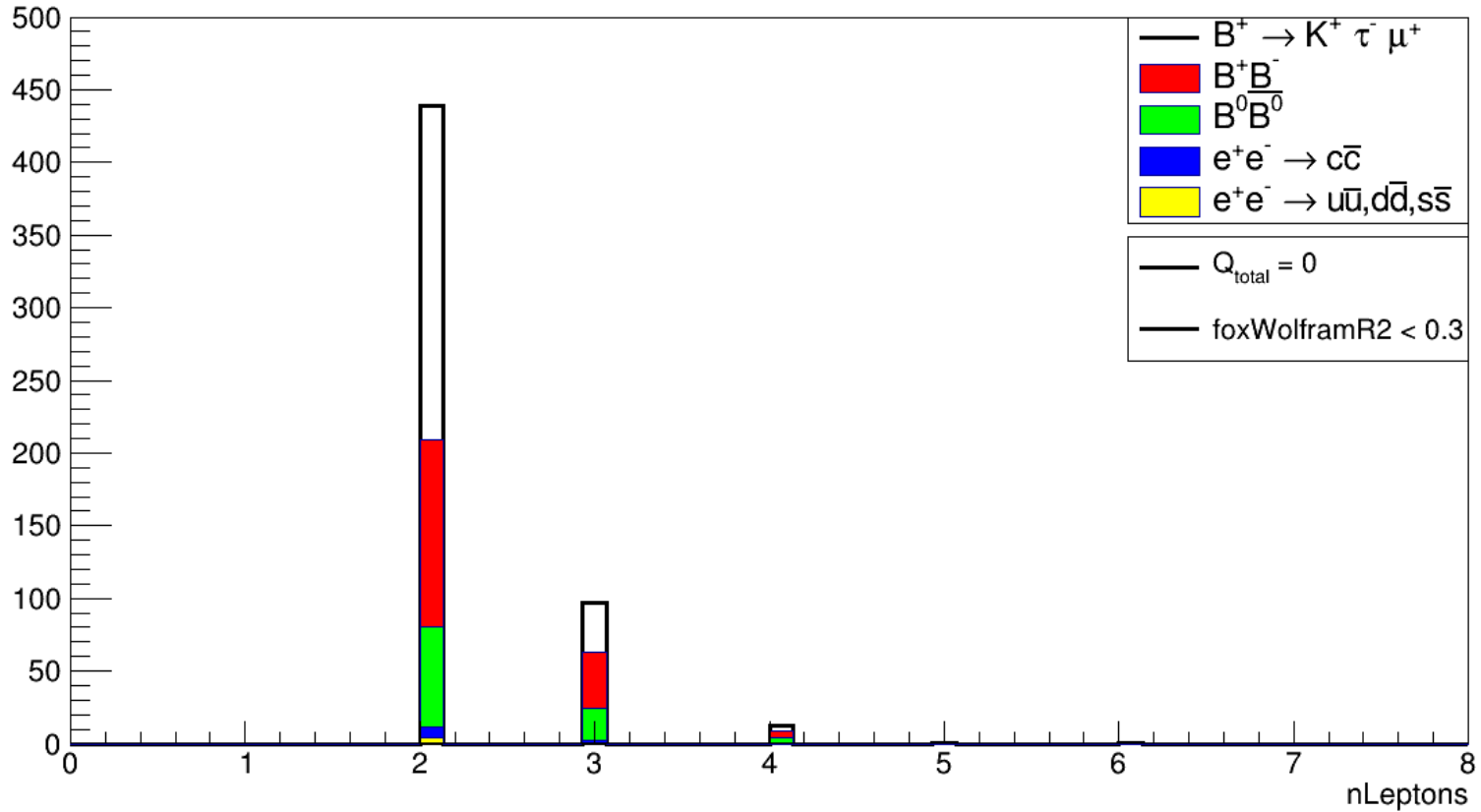
- After  $Q_{\text{total}} = 0$  cut

$$N_{\text{sig}} = 2684$$

$$N_{\text{B.G}} = 1755$$



# nLeptons



# nLeptons

- Before nLeptons==2 cut

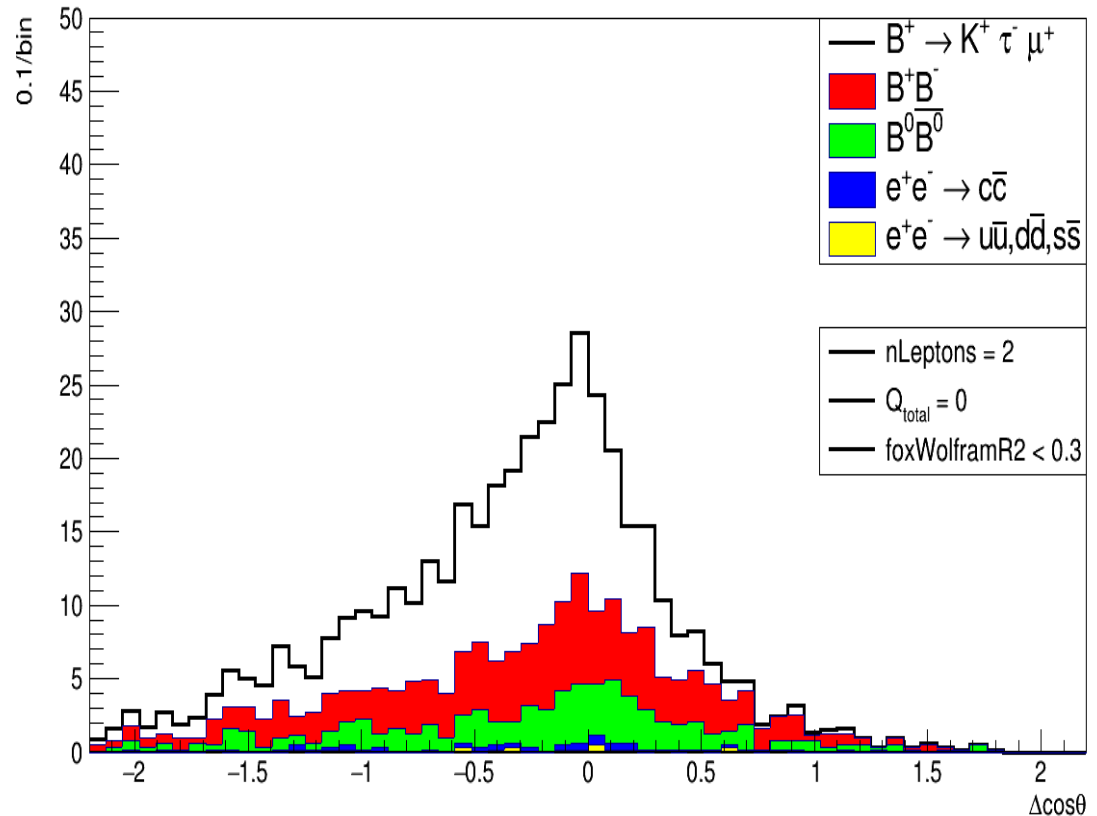
$$N_{\text{sig}} = 2684$$

$$N_{\text{B.G}} = 1755$$

- After nLeptons==2 cut

$$N_{\text{sig}} = 2300$$

$$N_{\text{B.G}} = 1304$$



# Ponzi FOM

- For both  $B^+B^-$ ,  $B^0\bar{B}^0$  backgrounds (norm. to one stream).
- After using all the signal side veto cuts  
 $N_{\text{sig}} = 11089$   
 $N_{\text{B.G}} = 10469$

