

$$B^0 \rightarrow D^{*-} \mu^+ \nu_{\mu}$$

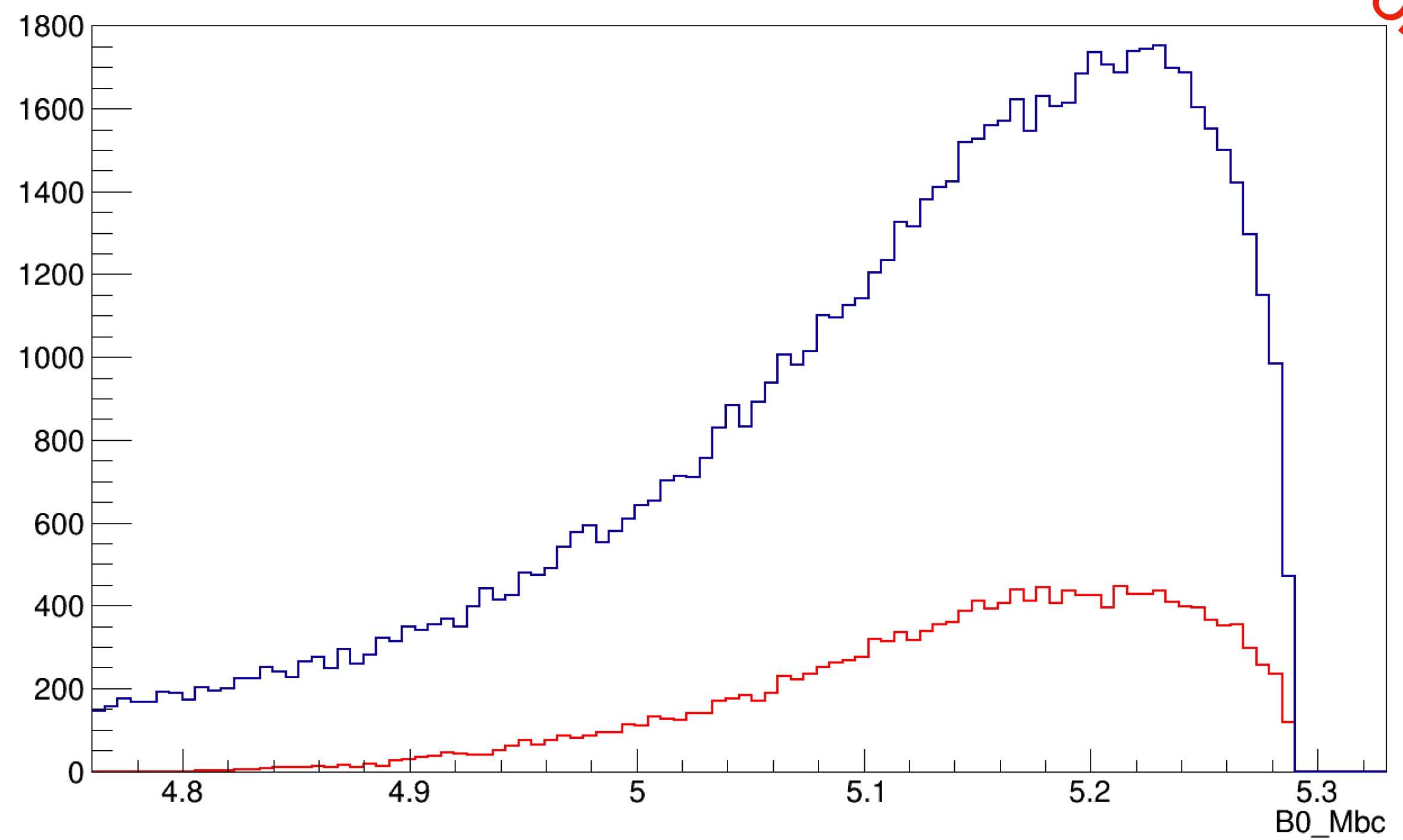
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Weekly Meeting  
July 8, 2022

# MC14rd vs MC14rd (using collections)

Signal efficiency (using SignalMC) : 35.6%

MC14rd ( $216fb^{-1}$ )

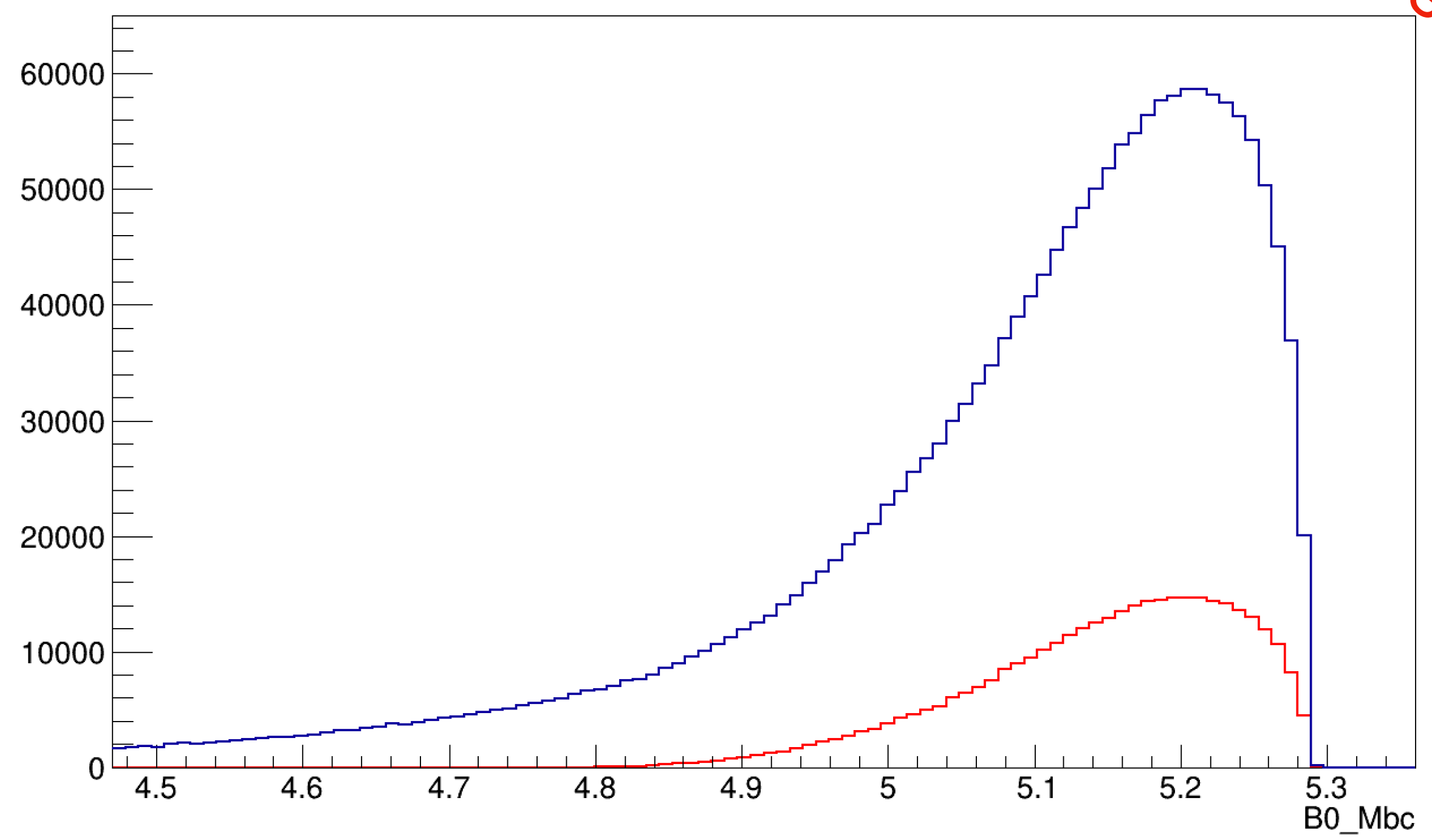


Total events: 85 070

Signal events: 16 936

Expected signal events: 106 280

MC14rd (using collections) ( $750fb^{-1}$ )



Total events: 1 881 457

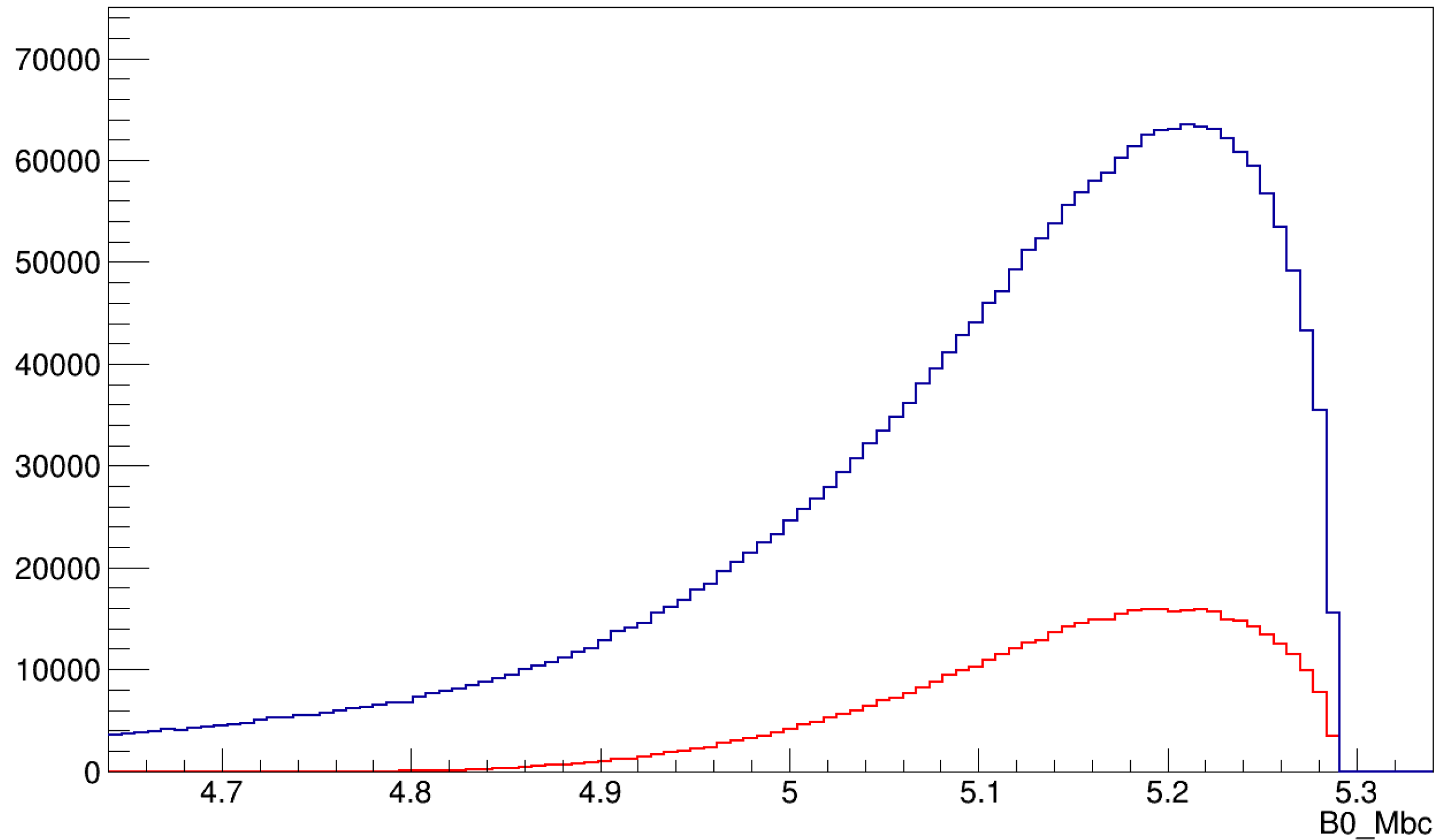
Signal events: 361 841

Expected signal events: 369 028

# MC15ri vs MC14ri

Signal efficiency (using SignalMC) : 35.6%

MC15ri ( $1ab^{-1}$ )

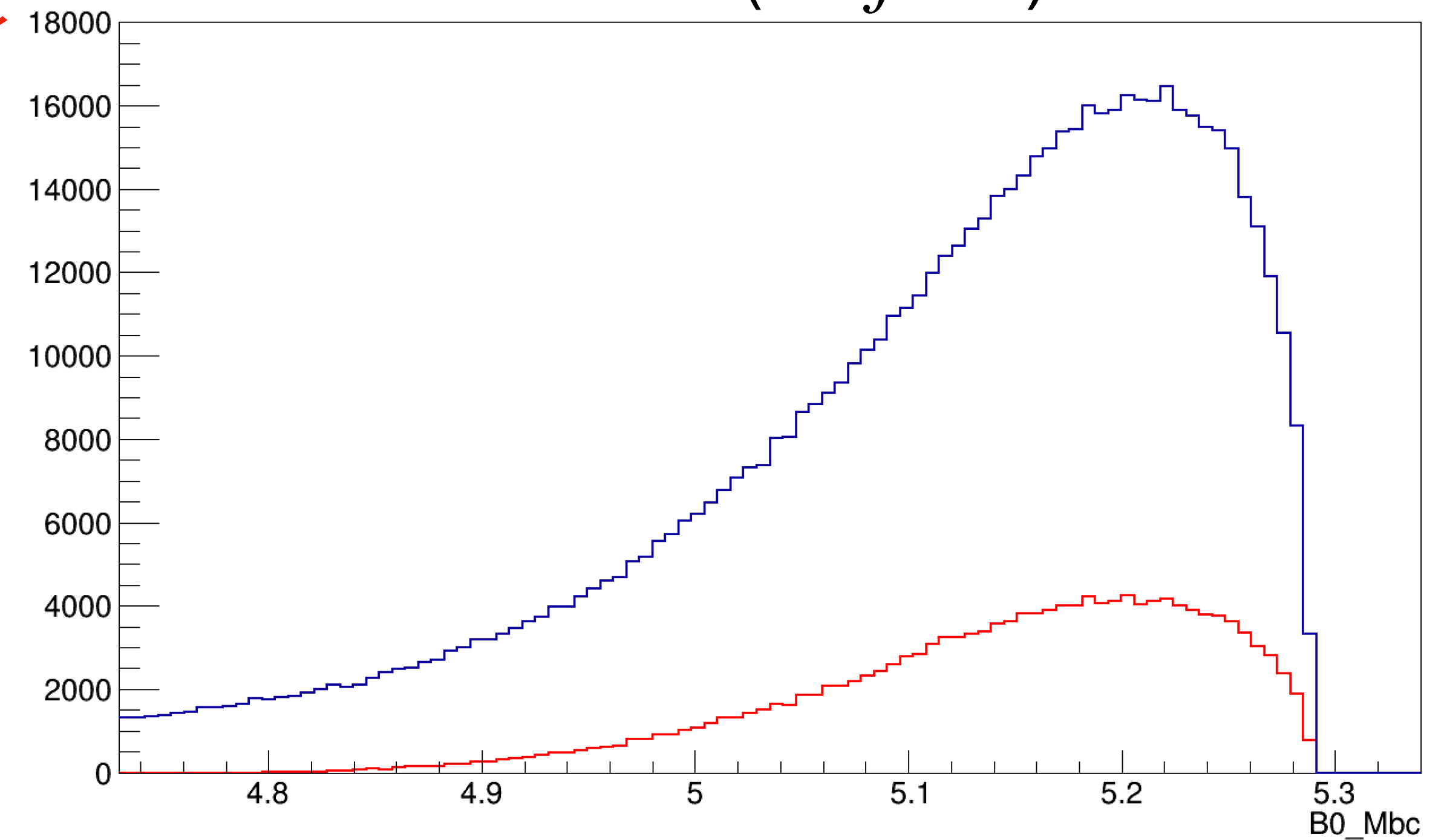


Total events: 2 586 843

Signal events: 501 986

Expected signal events: 492 037

MC14ri ( $300fb^{-1}$ )



Total events: 750 715

Signal events: 150 689

Expected signal events: 147 611

# Backup

# Signal efficiency

New signal efficiency (using SignalMC) : 35.6%

$$N_{signal} = BR(x10^{-6}) \times 2 \times efficiency \times 0.487 \times 1.0384412849(x10^6) \times Lumi(fb^{-1})$$