Stutus Report

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2013.12.10

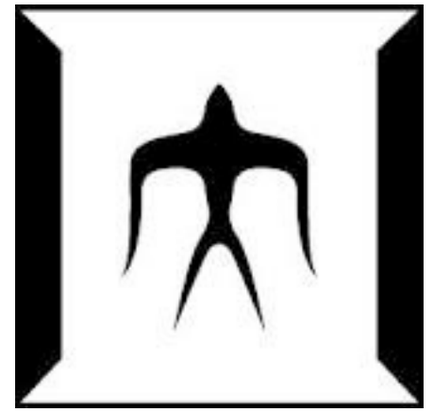
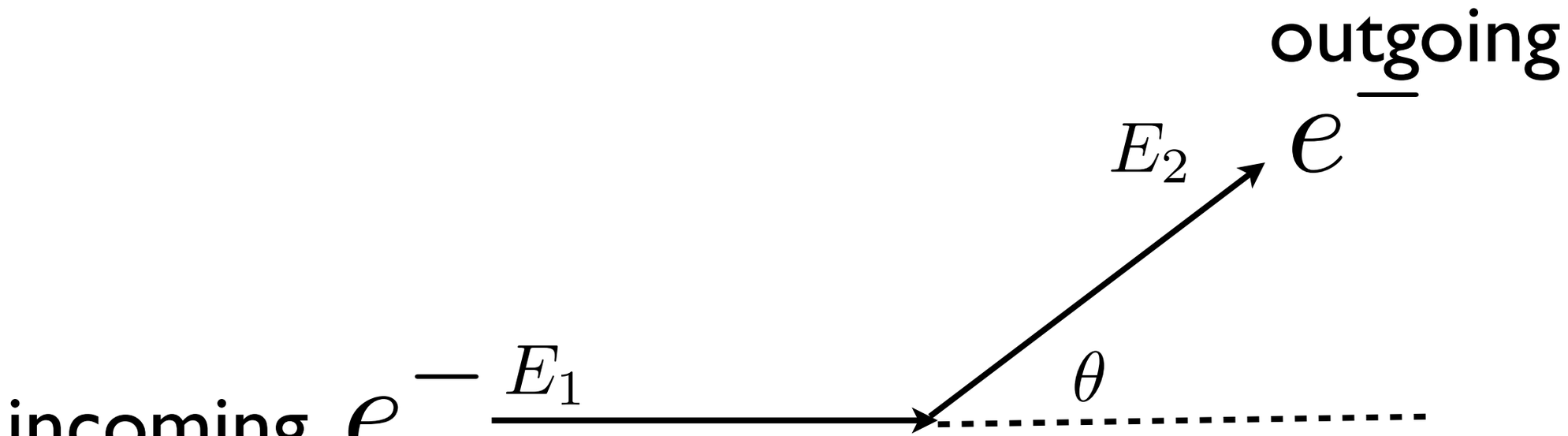


Table of contents

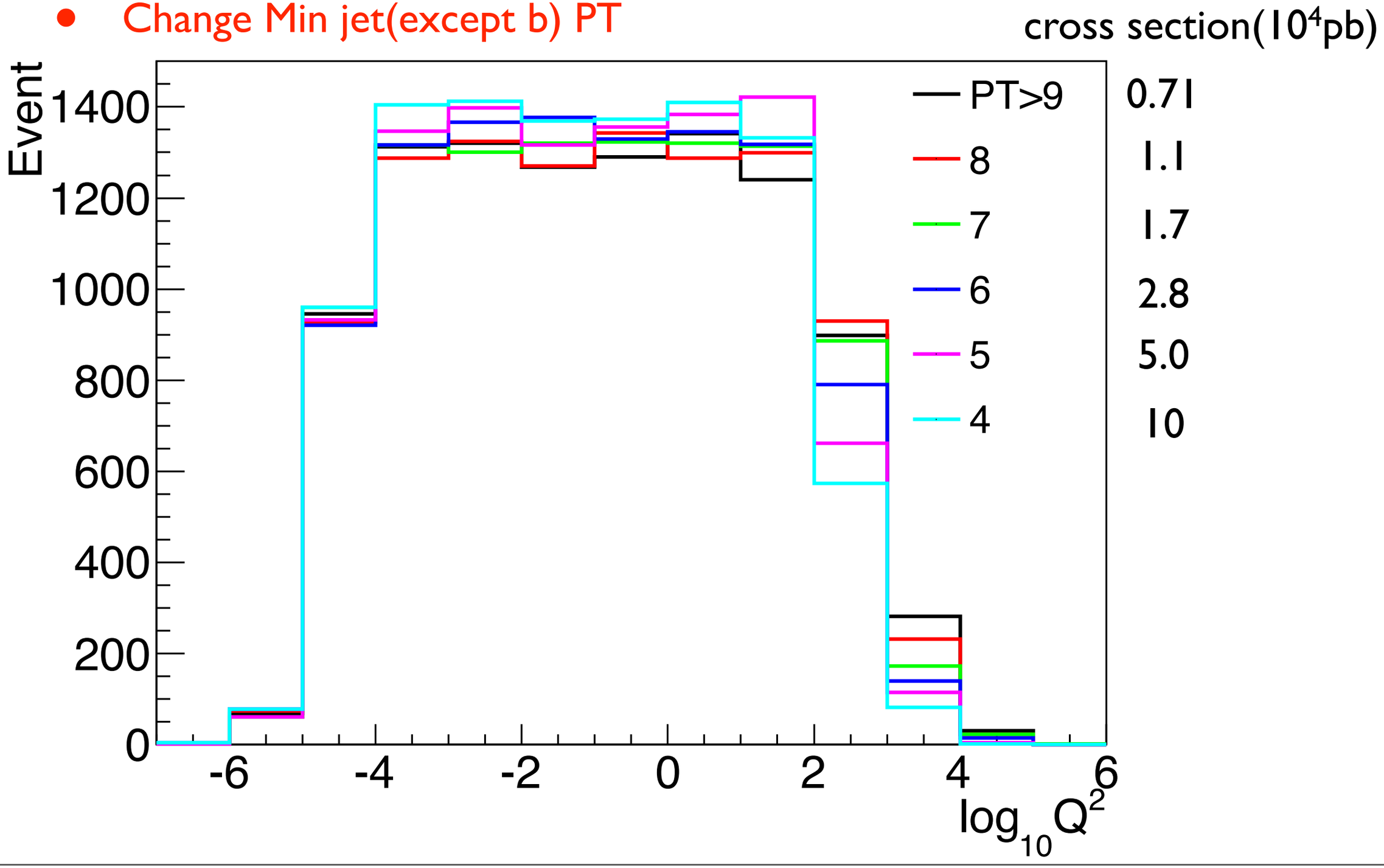
- Study NC background
  - Plot kinematic variable Q^2
  - Use parton level events(unweighted_events.root)
  - Change Max jet PT, Max lepton PT, Min Eta in run_card
  - Made 10,000 pe->e-jjj/h events



$$Q^2 = 4E_1E_2\sin^2(\theta/2)$$

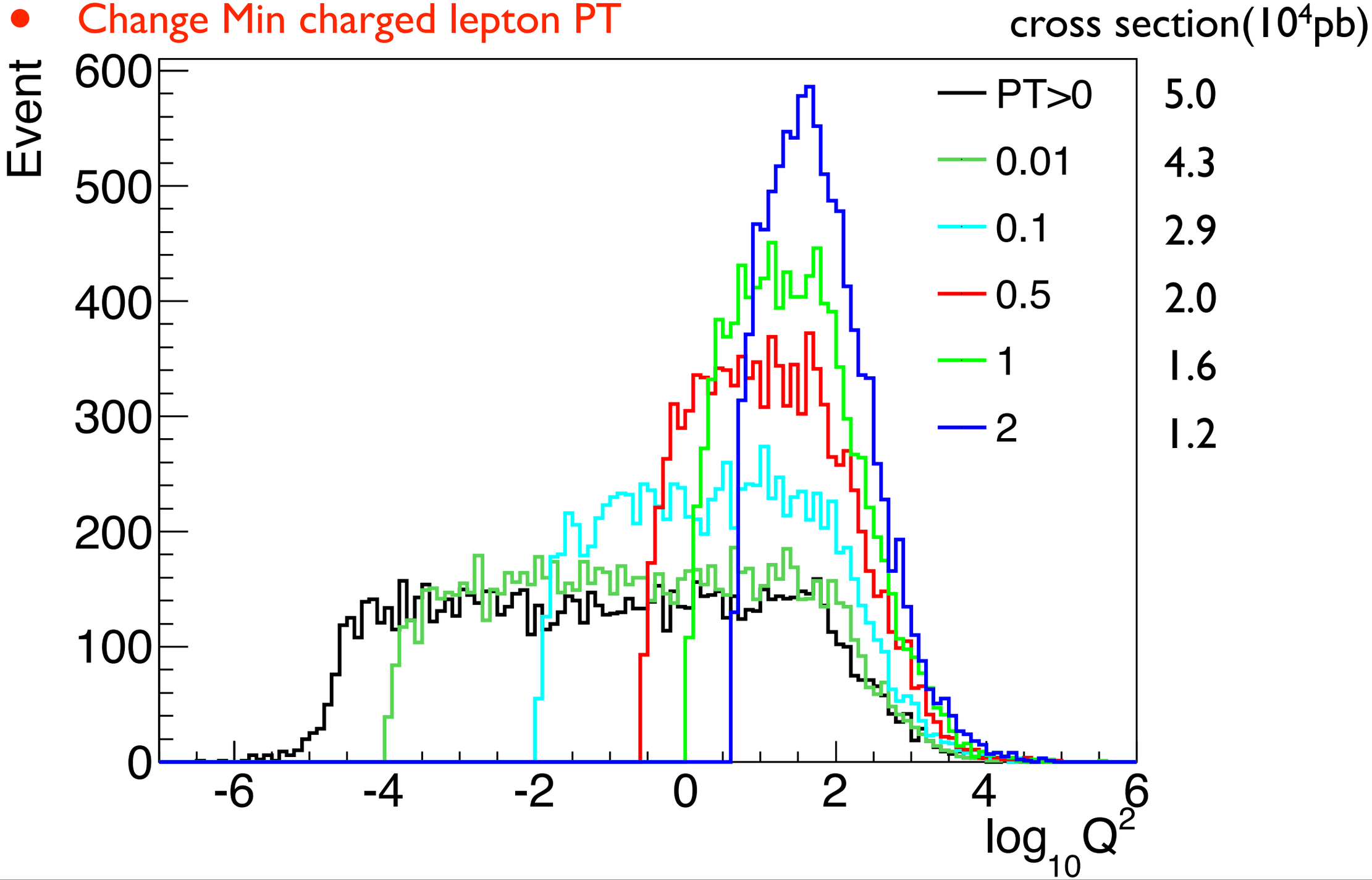
Compare PT cut

- Plot Q^2
- Min ΔR_{jj} = 0.1 (if 0, MadEvent can't work well)
- Max rapidity = 10 for all particle (0.6 for quarkonium)
- Change Min jet(except b) PT



Compare PT cut

- Plot Q^2
- Min ΔR_{jj} = 0.1 (if 0, MadEvent can't work well)
- Max rapidity = 10 for all particle (0.6 for quarkonium)
- Min jet(except b)PT = 5
- Change Min charged lepton PT



Compare Eta cut

- Plot Q^2
- Min ΔR_{jj} = 0.1 , Min jet(except b) PT = 5
- Change Max Eta for all particle(0.6 for quarkonium)