Status

How to identify isolated electrons

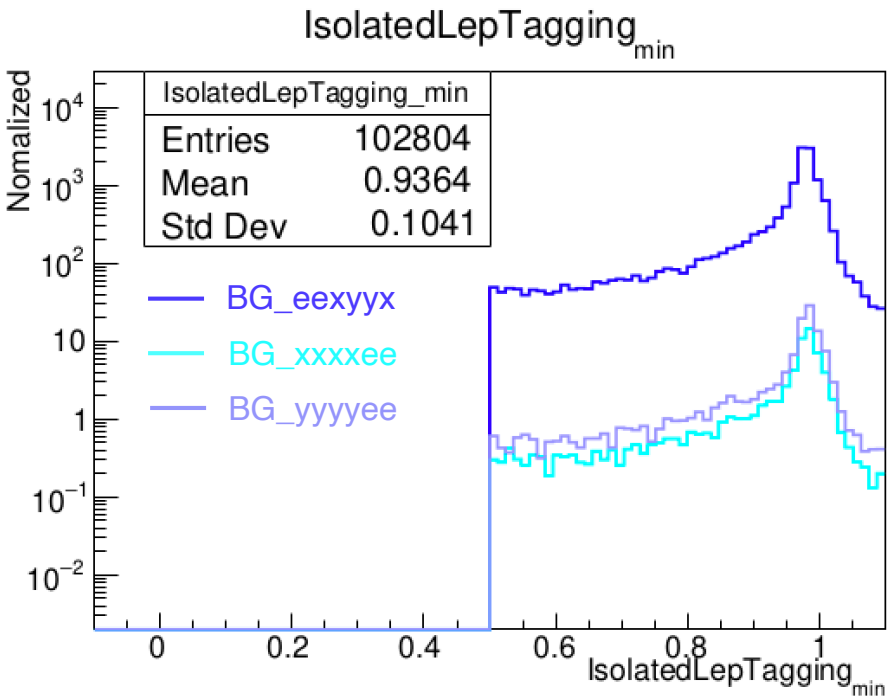
1. Standard method ← not work well

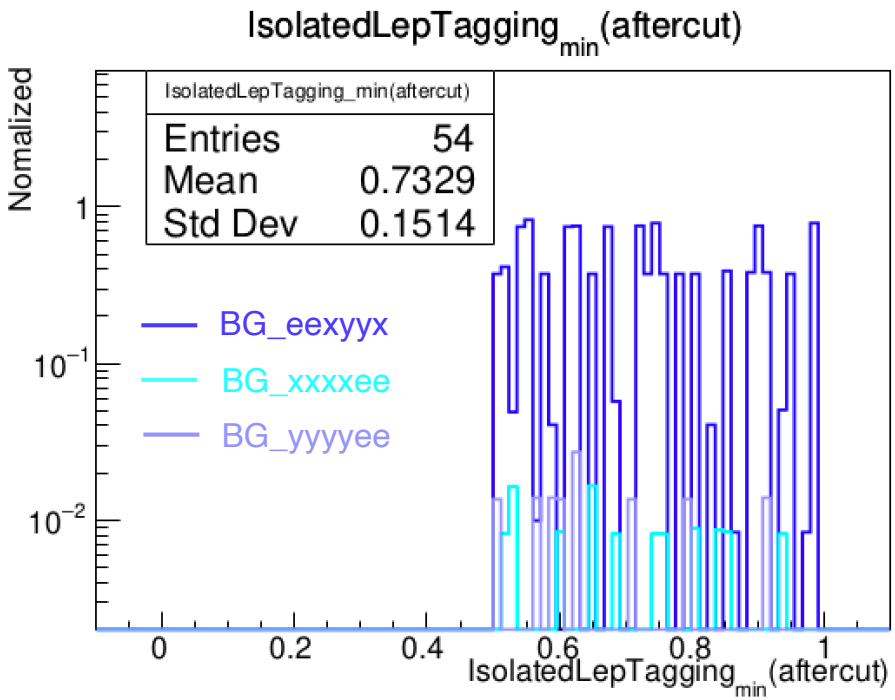
2. Check the minimum value of “IsolatedLepTagging”
(Output parameter by neural network)

IsolatedLepTagging

Only BG(full) plots

- Isolated e # = 2
- Isolated e is same sign($e_1 \times e_2 = 1$)
- $E_{iso} < 200$ [GeV]
- $-0.95 < \cos\theta_{isoe} < 0.95$





$\text{IsolatedLepTagging}_{min} > 0.9$

Reconstructed - old and new

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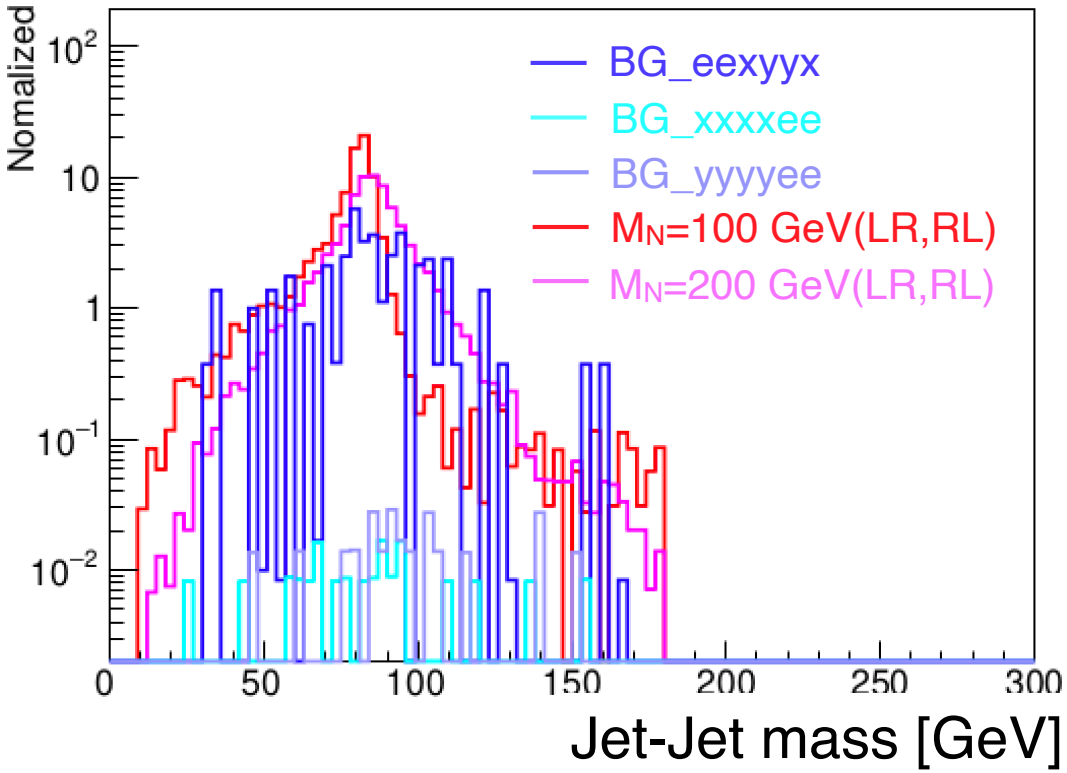
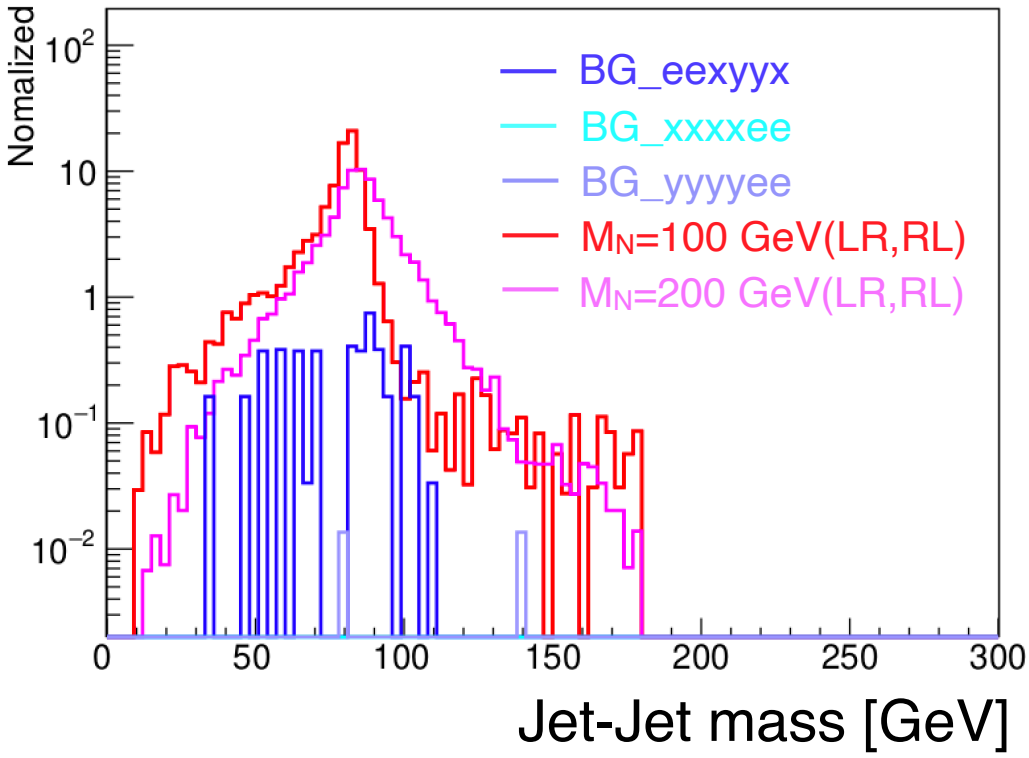
- **$\mathbf{IsolatedLepTagging_{min} > 0.9}$**

W mass(old)



W mass(**New**)



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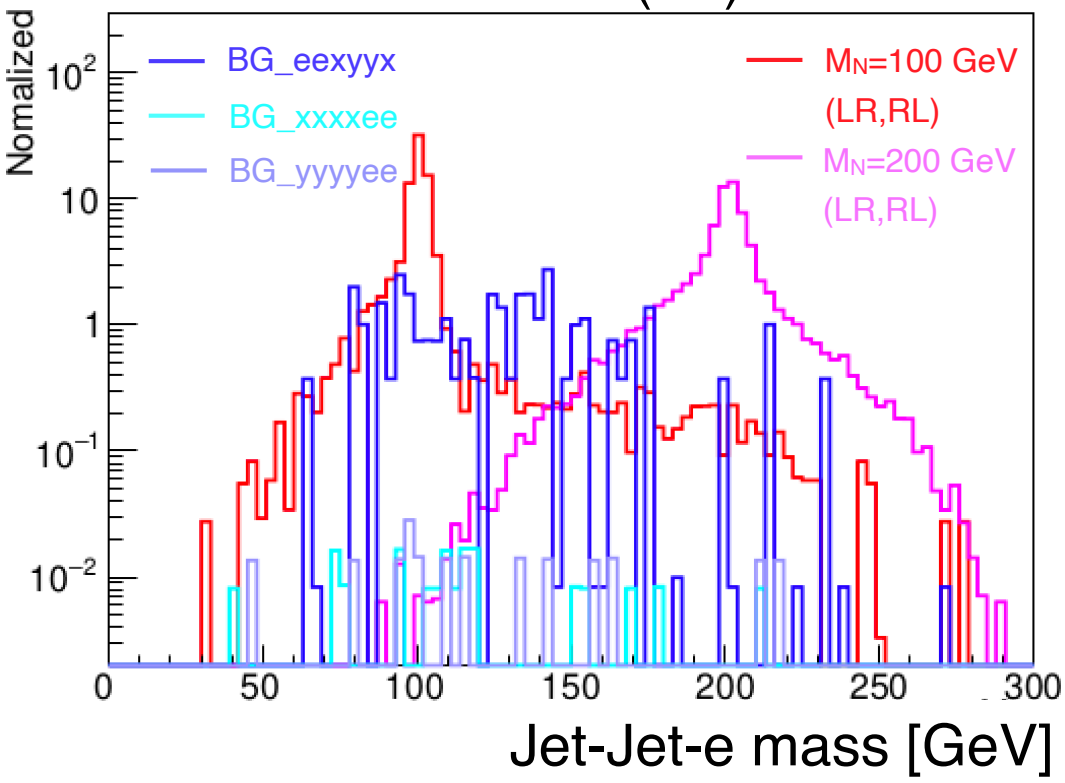
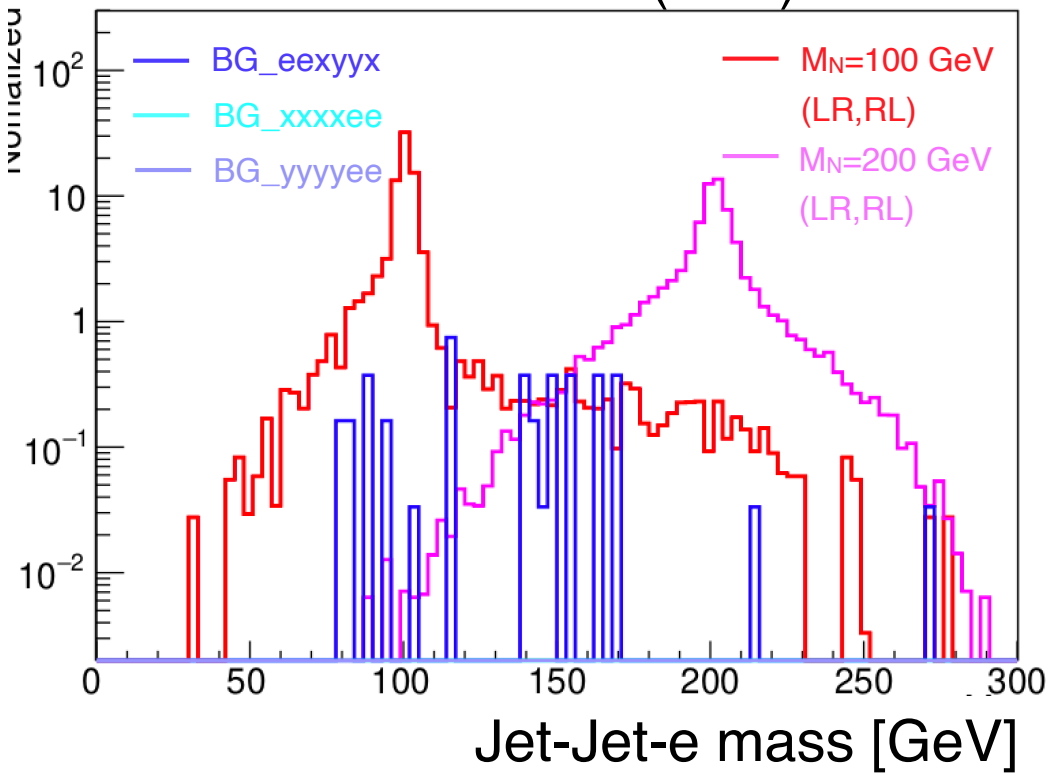
- **IsolatedLepTagging$_{min}$ > 0.9**

RHN mass(old)



RHN mass(**New**)



Plan

- Change signal samples
  Fast simulation -> Full simulation

  -> report on this at JPS2021(9/15)