Status of the e^+e^- -> gamma Z physics analysis

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Mz reconstruction

- **Mz reconstruction for the physics analysis**

-> Consieder how to cut out background events.

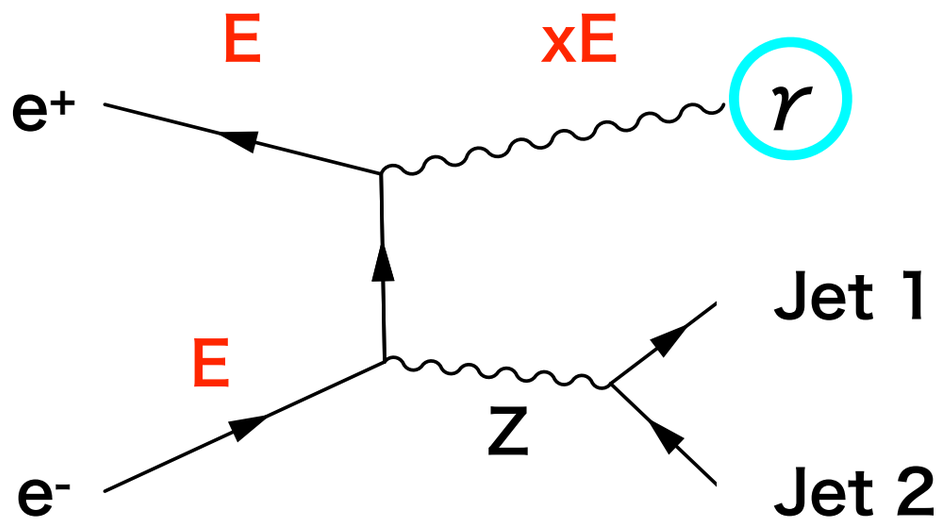
- DBD 250 GeV samples
- Shift to the new samples -> **Now working**

Signal:2f_z_hadronic

$m_Z^2 = s' = s(1-\beta)/(1+\beta)$

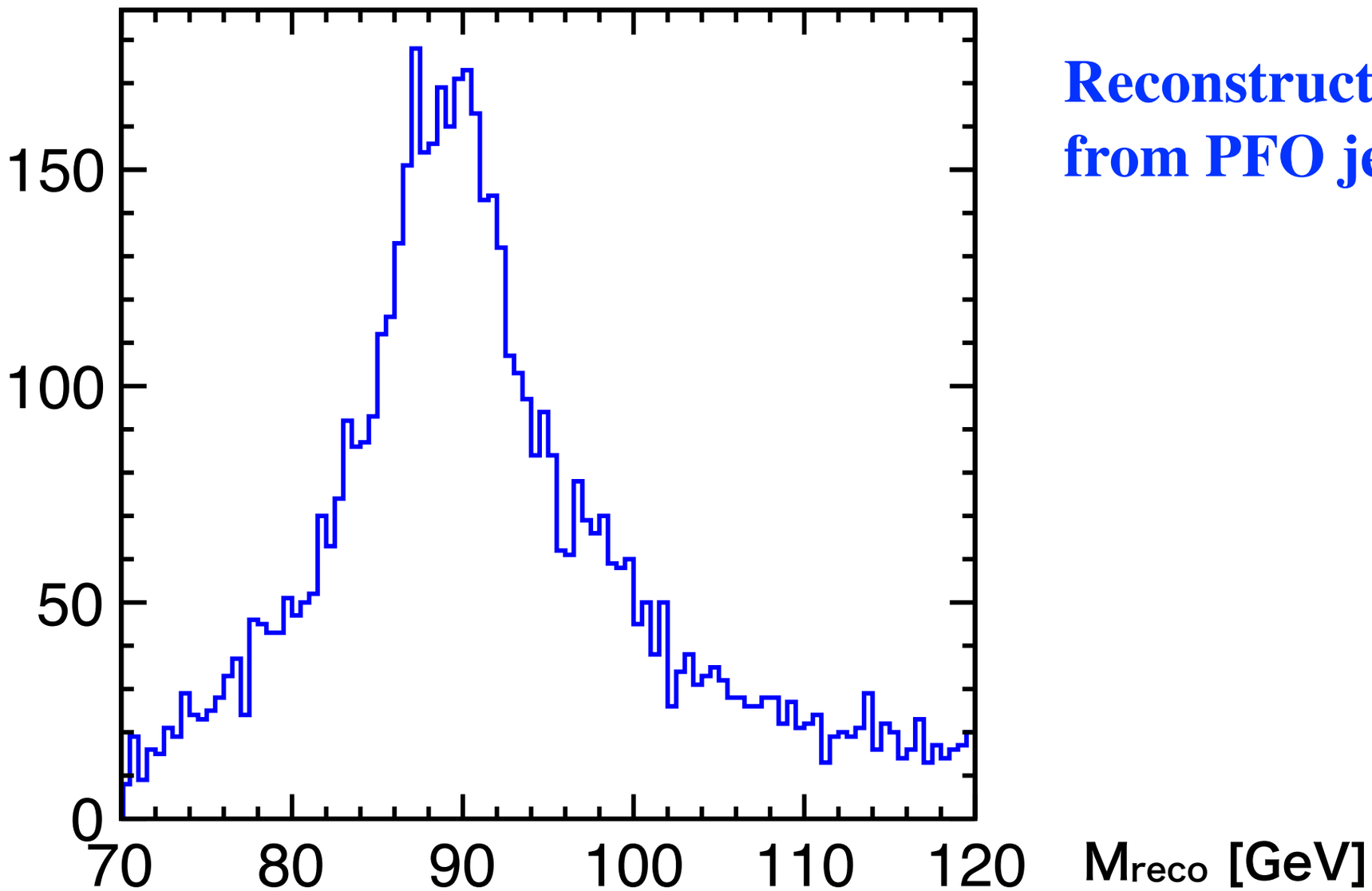
$$\beta = \frac{|\sin(\theta_1+\theta_2)|}{\sin\theta_1+\sin\theta_2}$$

θ_i: Polar angle of jet i



Temporary result

New mc-2020 signal samples (ee->Zγ, Z->2jets)



Reconstructed Mz from PFO jet angles

We don’t have to stick to the Mz reconstruction method mentioned before.

Other topic

- Give a talk about JES calibration in the LCWS2021

->Editing abstract

As for this, try to do MC-jet clustering using exactly the same particles used in the PFO-jet clustering.

Comparison between **E_{Jet}^{MC} using the same particles as PFO** and **E_{Jet}^{Reconstructed}** is more accurate.