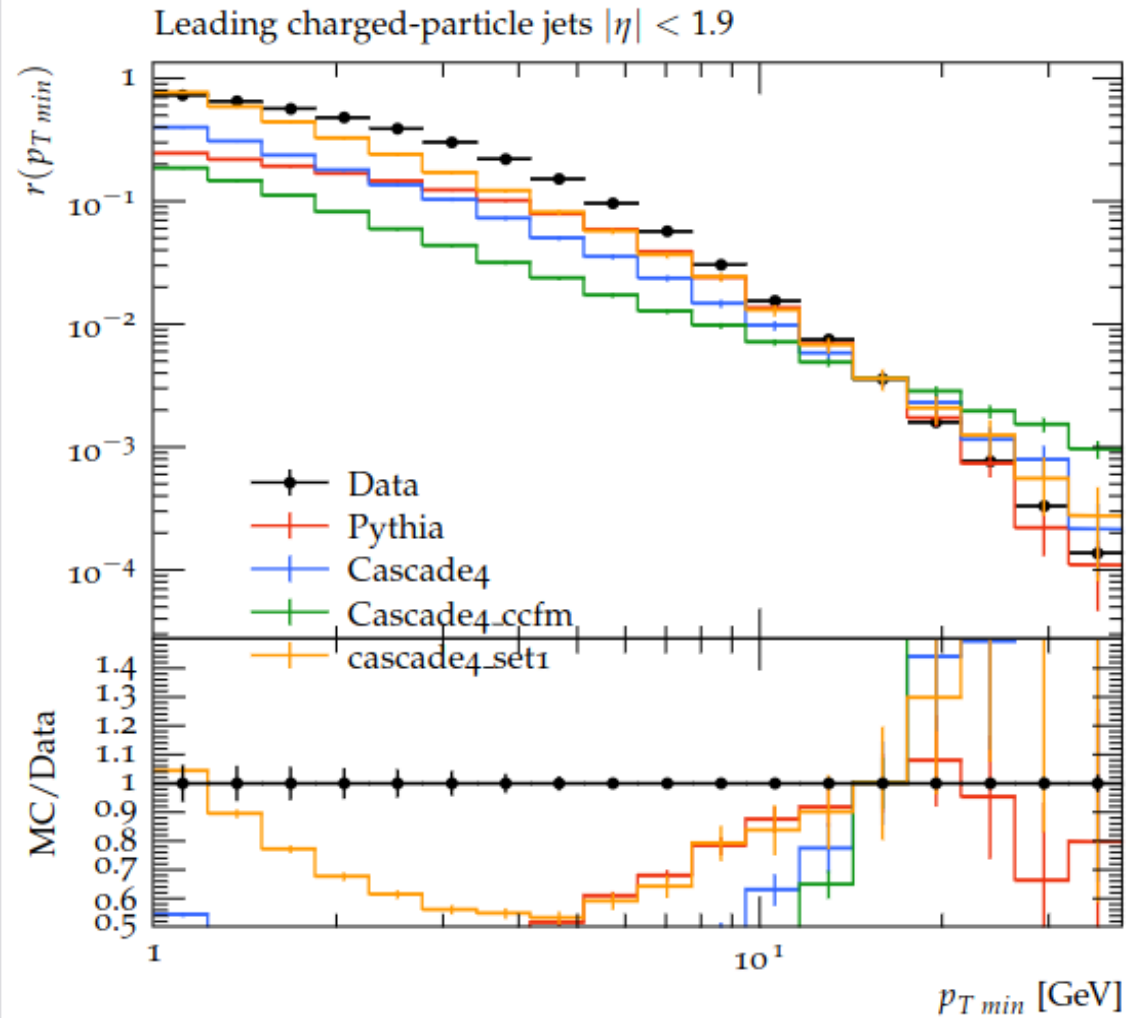


School internship at DESY

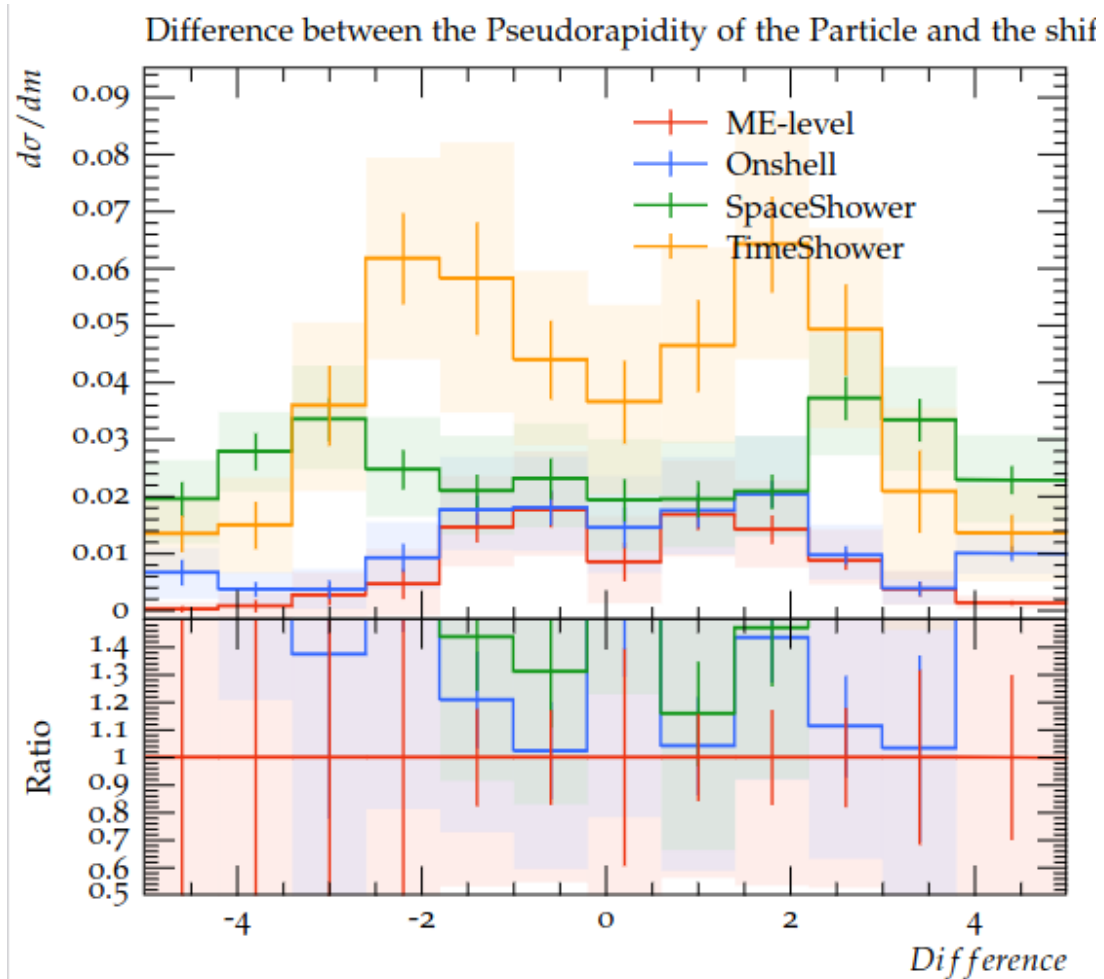
Moritz Gillen

Analysis of CMS_2015_I1380605

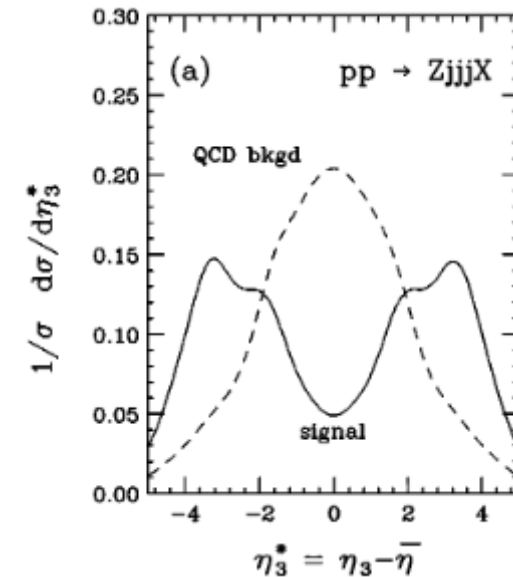


- First analysis with Cascade
- Difference in coming from TMD

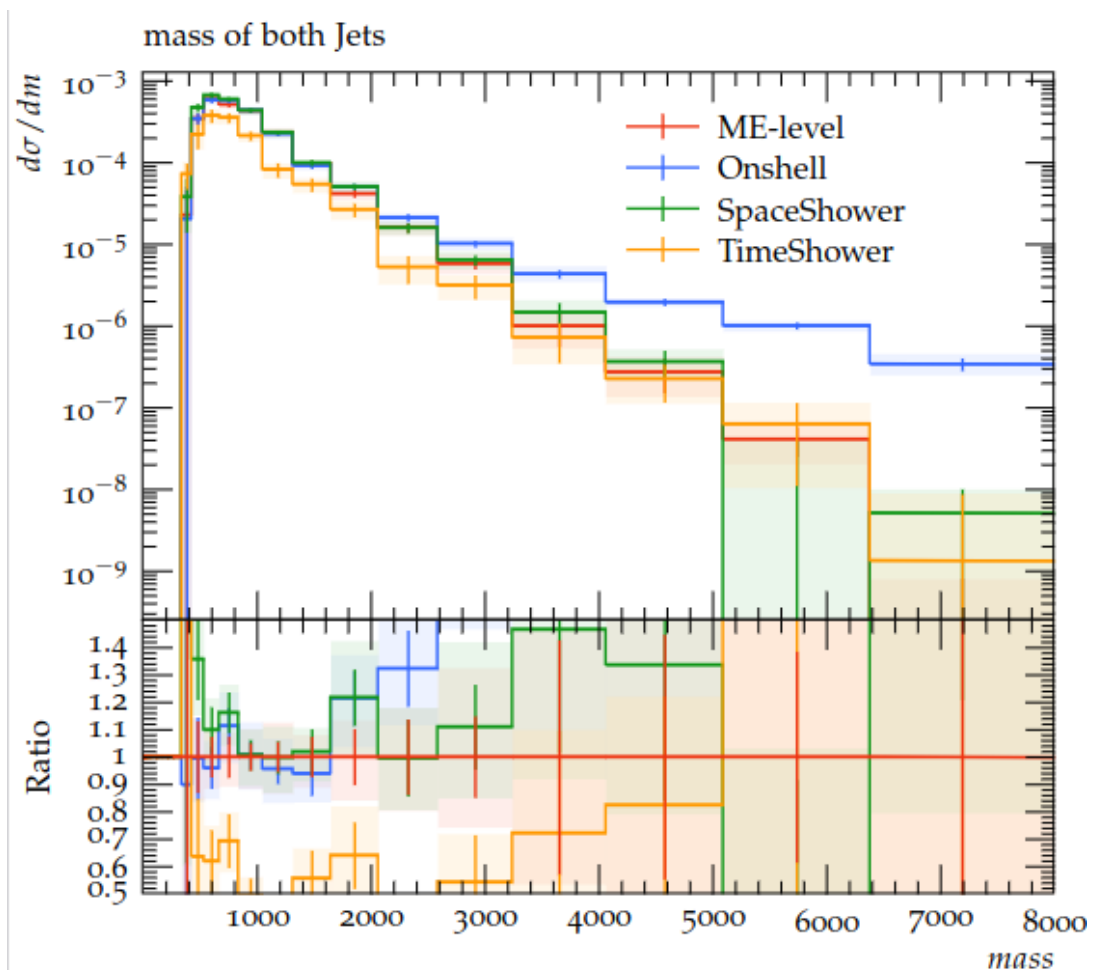
Z-Boson+ 2-Jet Event



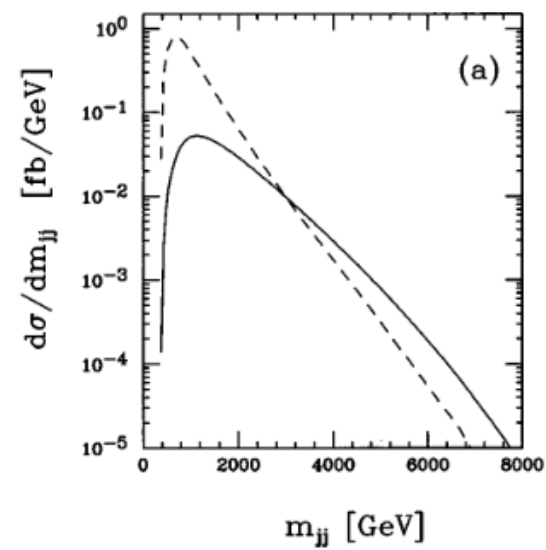
- Formula: $\eta_3^* = \eta_3 - \bar{\eta} = \eta_3 - \frac{\eta_j^{\text{tag } 1} + \eta_j^{\text{tag } 2}}{2}$.
- Difference between η of the Minijet ($p_T > 10$ GeV) and shifted η of the Jets ($p_T > 40$ GeV)
- Effect when PatonShower is included



Z-Boson+ 2-Jet Event



- Shows the mass of both Jets ($p_T > 40$ GeV)
- Effect when Onshell is included



Comparison with VBS Signal

