



Figure 1: The generator-level p_T^W distribution, with three instances of the prediction and its uncertainty: before the maximum likelihood fit, and reflecting the results of the two fits described in the text. The distribution and uncertainties obtained from the combined $(p_T^\mu, \eta^\mu, q^\mu)$ and $p_T^{\mu\mu}$ fit is shown in red, whereas the purple band shows the distribution obtained from the nominal $(p_T^\mu, \eta^\mu, q^\mu)$ fit. The generator-level distribution predicted by SCETLIB + DYTURBO before incorporating *in situ* constraints is shown in gray. The ratio of the postfit predictions to the prefit prediction (in gray), as well as their uncertainties, are shown by the shaded bands in the bottom panel.