

## Supplementary material for LHCb-PAPER-2016-021

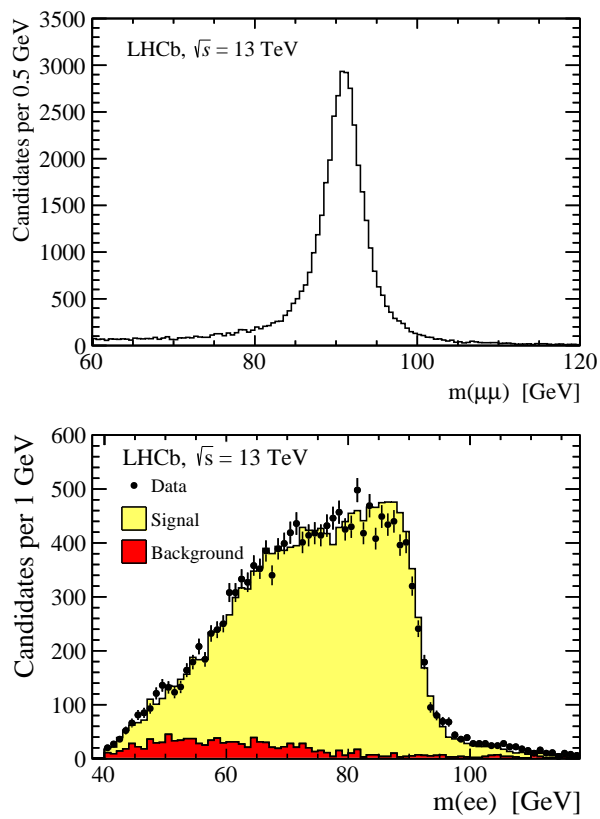


Figure 6: The invariant mass distribution of the selected dimuon (top) and dielectron (bottom) candidates. For the dielectron invariant mass distribution the expected signal from simulation is shown in yellow, and the background contribution is shown in red. The signal contribution is normalised to the background-subtracted data. Since the dimuon final state is over 99% pure, no such comparison is shown.

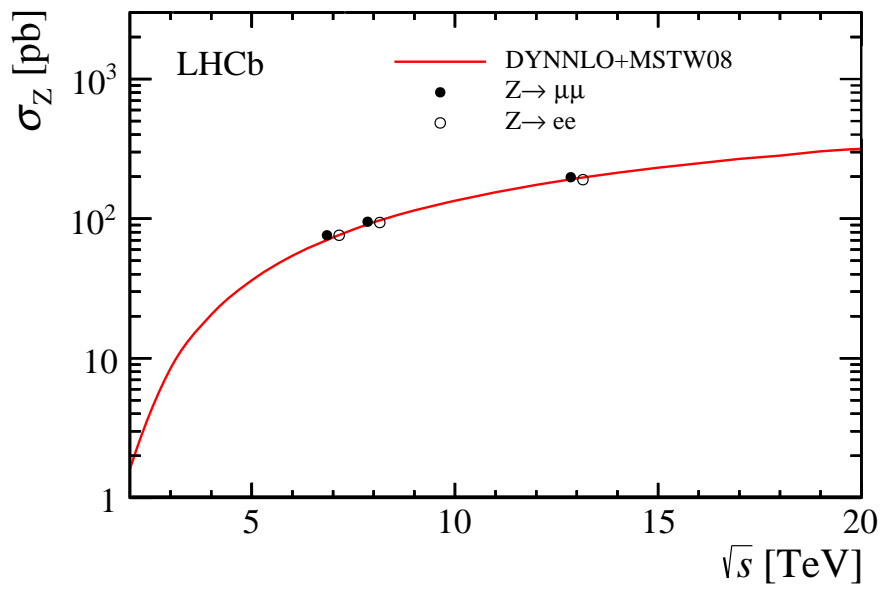


Figure 7: The Z boson production cross-sections measured using dimuon and dielectron final states at different pp collision energies. The points are displaced horizontally for clarity. The curve shows the NNLO theoretical prediction, neglecting theoretical uncertainties.