# Supplementary material for LHCb-PAPER-2015-003

This appendix contains supplementary material that will posted on the public cds record but will not appear in the paper.

The $e^+e^-$ invariant mass distribution for the selected candidates is shown in Fig. 6. The broad distribution of masses below the Z-boson masses is a consequence of bremsstrahlung. The selection requirements have their main impact on the low-mass part of the distribution, which is well modelled. The mis-modelling close to the Z-boson mass, which could result from a resolution effect, has no impact on the analysis.

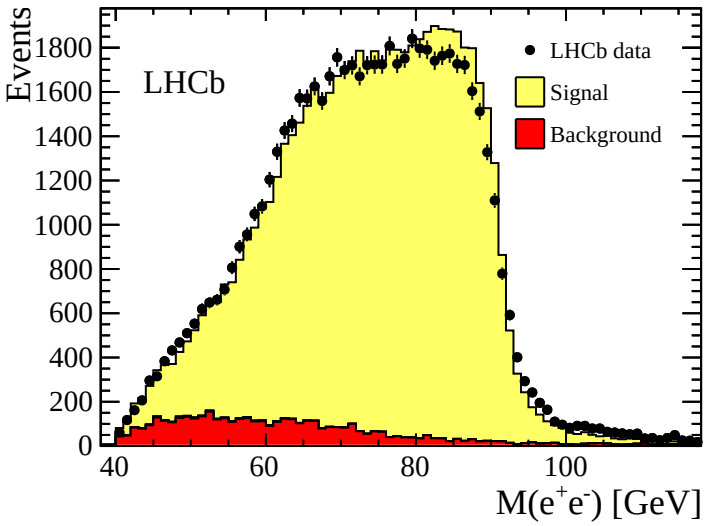


Figure 6: Comparison between data and simulation for the distribution of $M(e^+e^-)$. The opposite-sign data are shown as points with error bars, the background obtained from same-sign data is shown in red (dark shading), to which the expectation from $Z \to e^+e^-$ simulation is added in yellow (light shading). The simulated distribution is normalised to the background-subtracted data. The $\tau^+\tau^-$ background is also included (green), though not visible.