## 1 Supplementary Material

For presentations, plots of the projections in mass and time of the sum of the 2011 and 2012 datasets are provided. Figure ?? shows the projection of the summed dataset in mass whilst Figure ?? shows the projection in time.


Figure 1: Mass distribution for the combined 2011 and 2012 dataset. The fit model described in the text is superimposed (red line). The sum of the partially reconstructed and combinatorial background is shown (solid yellow) and the $B^{0}$ component (open blue).


Figure 2: Time distribution for the combined 2011 and 2012 dataset. The fit model described in the text is superimposed (red line). The sum of the partially reconstructed and combinatorial background is shown (solid yellow) and the $B^{0}$ component (open blue).

