

1 Supplementary material for LHCb-PAPER-2020-030

2 Figure 1 shows the distribution of BIC values obtained by scanning over the LASSO
3 parameter λ for the first and second steps of the model selection.

4 Figure 2 shows the decay-time distribution of prompt candidates used to calibrate the
5 per-candidate decay-time uncertainty.

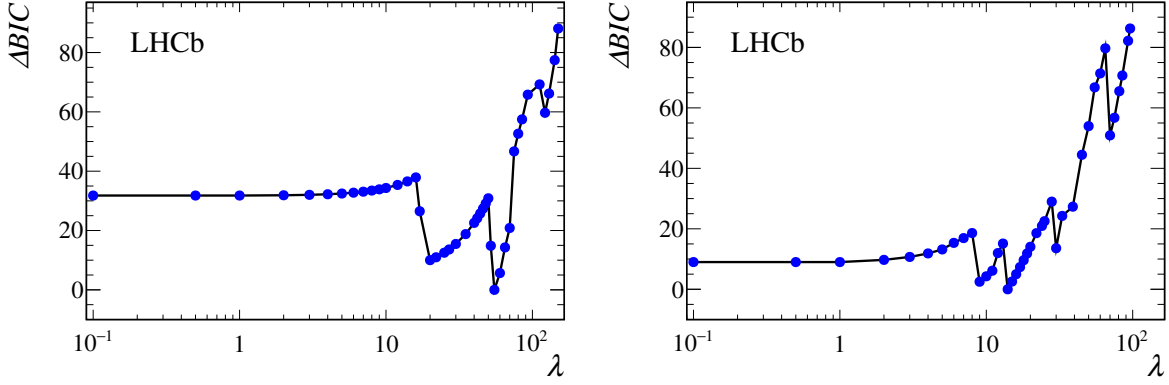


Figure 1: Difference in the BIC value from its minimum as function of the LASSO parameter λ for the (left) first and (right) second step of the model selection.

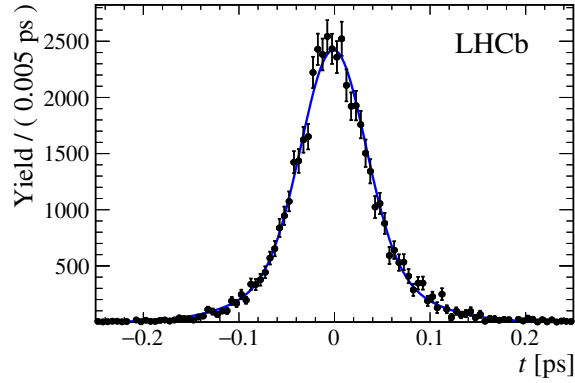


Figure 2: Decay-time distribution for candidates reconstructed from promptly produced D_s^{\mp} candidates combined with random prompt $K^{\pm}\pi^{\pm}\pi^{\mp}$ companion tracks using Run 2 data.