

## Supplementary material for LHCb-PAPER-2023-042

The 2D distributions of pairs of the invariant masses  $m(D^+D^-)$ ,  $m(D^+\Lambda)$  and  $m(D^-\Lambda)$  are shown in Fig. 1. The candidates are required to be within the signal region, defined to be within three times the experimental resolution, in which the background yield fraction is about 14%.

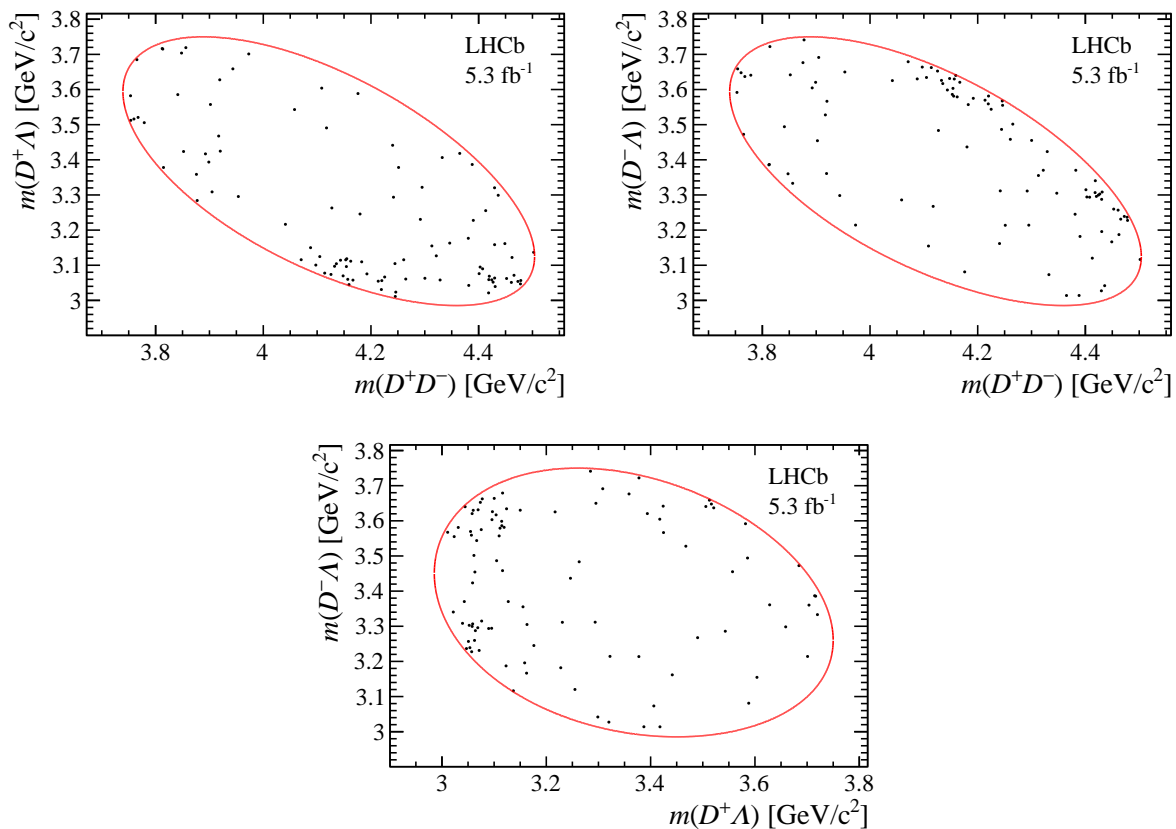


Figure 1: Distributions of the intermediate two-body invariant masses of  $\Lambda_b^0 \rightarrow D^+D^-\Lambda$  candidates. The red curves show the kinematic limits.