## 1 Supplementary material

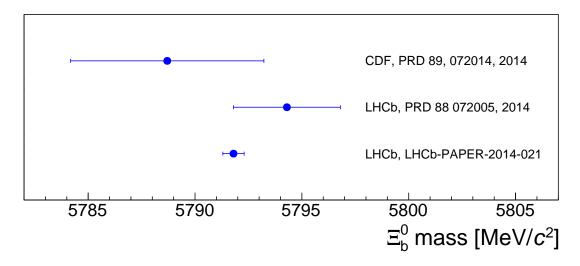


Figure 5: Summary of mass measurements of the  $\Xi_b^0$  baryon.

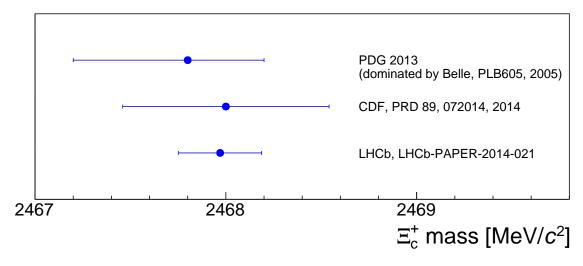


Figure 6: Summary of mass measurements of the  $\Xi_c^+$  baryon. The PDG result is the average of several results, but is dominated by the indicated Belle measurement.

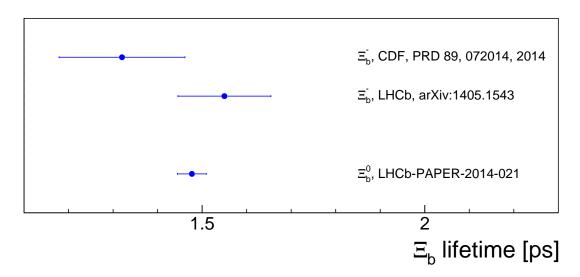


Figure 7: Lifetime measurements of the  $\Xi_b^-$  baryon and the  $\Xi_b^0$  lifetime as determined in this analysis.