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Lifetimes of heavy hadrons

We present our predictions for lifetimes, lifetime ratios and semileptonic decay widths of singly-charm (bottom) mesons and baryons as well as of double-charm baryons within the Heavy Quark Expansion (HQE) framework, including all known corrections.

We find an excellent agreement between the data and the experiment for the case of singly-charmed and bottom hadrons. In particular, in contrast to earlier findings, our results accommodate the experimentally-favoured hierarchy of the singly charmed baryons. In the double-charm sector, we find a good agreement with the experiment for the lifetime of

 Ksi_{cc}^{++} and give predictions for the remaining two unmeasured lifetime ratios.

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