

# Contribution of the Darwin operator to non-leptonic decays of heavy quarks

*Wednesday, October 7, 2020 6:13 PM (17 minutes)*

The total decay width of heavy hadrons can be systematically computed using the Heavy Quark Expansion (HQE) framework, as a series in inverse powers of the heavy quark mass  $m_Q$ . Computation of higher corrections is crucial both to test the consistency of HQE itself and to constrain the size of possible new physics effects. In this talk I will present the result of our recent paper on the determination of the two-loop  $1/m_b^3$  correction (Darwin term) to the non-leptonic decays of B mesons.

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**Session Classification:** Young Scientists Session