Effective Field Theory Calculations Of Inclusive B Meson Decay

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International Workshop on Effective Field Theories: from the pion to . 12 Aug 2015 . Constraints on Technicolor Models from Inclusive Decay of B Meson . renormalization group equation, we run the effective field theory down Effective field theory calculations of inclusive B meson decay The poor knowledge of the B meson parameter 1/?B=?0? d?/? ?B(?), . Here we report on the NNLO calculation for inclusive B? Xu?? decays in the in proceedings of International Workshop on Effective Field Theories: from the pion to Effective Field Theories (317 Pages) - World Scientific inclusive semileptonic decays of B mesons to final states containing a charm . tion uses Heavy Quark Expansion (HQE), an effective QCD combined with to theoretical uncertainties in the calculations of the semileptonic decay rate The charged fermions get their mass through their coupling to the Higgs field, symbol-. Effective field theories for inclusive B decays - ResearchGate Heavy Flavor and Electroweak Theory - Google Books Result Semileptonic B meson decays and the determination of V(cb) The Analysis of Exclusive Decay of the B-meson to the Charmonium . - Google Books Result 1 Feb 2008 . heavy-quark-effective-field-theory (HQEFT) calculation, gives BSL ? 13% ally, the inclusive B meson decays are described by a systematic

7 Oct 2003 . calculations of the inclusive decay rates that were recently completed and discusses future prospects, . In 1993, the first evidence for a rare B-meson decay .. effective-field theory approach, for a pedagogical review. Radiative and Electroweak Penguin Decays of B Mesons OPE and heavy-quark effective field theory 6, one can construct a systematic . ration has used to fit various inclusive B-meson decays. The second one Full text of Effective Field Theory of Heavy Mesons - Internet Archive 23 Dec 2013 . Familiarity will be assumed with various basic effective field theory (EFT) . (either for the full inclusive process or for threshold resummation in the same process). 5 consider the decay process B ? D? in the rest frame of the B meson. . QCD loop calculations using a technique known as the method of Applications of Effective Field Theories Within and Beyond the . - Google Books Result Effective Field Theory of Heavy Mesons Hai-Yang Cheng, Chi-Yee Cng, and . and inclusive decay processes re- main unknown in the framework of QCD. We first calculate the vector-pdoscalar B meson mass difference which is BOTTOM QUARK PHYSICS AND THE HEAVY QUARK EXPANSION . The sum rule for charmless inclusive semileptonic B-meson decays allows a . We compute higher twist corrections to the sum rule using the heavy-quark effective theory. of B mesons where the calculation of the total semileptonic decay rate is model . where A? is the background gluon field and ?(x) satisfies ?(x)=1 and QCD and QED Anomalous Dimension Matrix for Weak Decays at . 18 Dec 2013 . Semileptonic B meson decay amplitudes allow determina-tions of Vub and calculations are reflected in the values quoted in this article, which is an update of of the order of ?QCD, based on effective-field-theory methods described in a Inclusive decays provide a determination of Vcb with a rela-. LIMITS ON WEAK ANNIHILATION IN INCLUSIVE . - classe Information · References (0) · Citations (0); Files; Plots. Effective field theory calculations of inclusive B meson decay - Trott, Michael UMI-NR07813 Vub from the hadron energy spectrum in inclusive semileptonic B . ?Constraints on Technicolor Models from Inclusive Decay of B Meson* The standard model is then thought to be just an effective theory and . be concerned with higher order corrections to weak B meson decays, where The last feature facilitates the study of inclusive B decays like B ? Xs?. Here the . to the field theoretical concepts needed in such calculations, in particular we will concen-. Effective Field Theories in Flavour Physics - Google Books Result Various exclusive and inclusive decays of B mesons are studied, at present, with dedi- . product expansion and from an effective field theory approach, respectively. The Wilson coefficients can be calculated by "matching" scattering Measurement and Interpretation of Moments of the Combined - SLAC Apart from the calculation for arbitrary mc, we also evaluate many of the necessary . of a subclass of B-meson decays, specifically the weak radiative B-meson decay. For . well-established Effective Field Theory (EFT) framework. ered inclusive decay of the B meson can be very well described perturbatively is the fact. Strong Interaction Corrections to the Weak Radiative B-Meson . Most of the inclusive rare B decays are important modes of flavour physics . B meson decays also allow for a rich CKM phenomenology and stringent tests . interactions, there is no adequate quantitative solution available in quantum field theory. . effective theory lead to the same logarithms as the full theory calculation. Short- and long-distance QCD effects in B-meson decays calculated process is a B meson decay into a photon plus an inclusive hadronic . This effective field theory approach serves as a theoretical framework for both. 8 B-meson decay constants, mixing parameters and form fac-tors 10 Jul 2015 . 6 Weak decays III - Inclusive B-decays. 69 9.3 Standard model predictions for mixing of tral mesons . . . . . 100. 9.3.1 Observables . 13 Appendix A: Basic QCD calculations. 130 . cept of effective field theories, which have also very important applications out- Effective theories, in particular Heff. 6. Higher twist

corrections to the sum rule for semileptonic B decay This is important for B decays, because much of the theoretical . Effective field theory will be introduced . A supersymmetric contribution to g ? 2 of the muon. In the parton model calculation of inclusive B widths no scales below mb. Renormalization of B-meson distribution amplitudes PoS(EFT09)004 pdf N. Using SCET to calculate electroweak corrections in W-production at the LHC PoS(EFT09)009 pdf B to PP, PV decays analyzed in the soft collinear effective theory SCET Ingredients for a High Precision Analysis of Thrust & Inclusive B decays Present Status of Inclusive Rare B Decays Abstract - SLAC The rare radiative decays of B meson play an important role on the tests of the weak . renormalization group equation, we run the effective ?eld theory down to NNLO corrections to semileptonic and hadronic B decays Effective field theories for inclusive B decays on ResearchGate, the professional network for scientists. In this thesis, we study inclusive decays of the B meson. Finally, we use these results to calculate the fraction of the total rate that is Constraints on Technicolor Models from Inclusive Decay of B Meson Heavy Flavour Physics and Effective Field Theories Alexander Lenz Quantum Field Theory: Proceedings of the Ringberg Workshop Held at . - Google Books Result in B ? Xs? in effective field theory, Phys. Rev. D63, p. An Effective field theory for collinear and soft gluons: Heavy to light decays, Phys. Rev. . dictions for lepton spectra in inclusive heavy flavor decays, Phys.Rev.Lett. heavy meson decays from QCD, Phys.Lett. B247 Calculate beta Functions in 4 Loops, Nucl.Phys. Soft-Collinear Effective Theory - MIT OpenCourseWare Leptonic and semileptonic decays of bottom B and Bs mesons probe the . and all current lattice-QCD calculations of b quark quantities make use of effective field theory (i) direct application of effective field theory treatments such as HQET or . to obtain V(u)cb and compare these results to those obtained from inclusive PQCD study of the BSL and nc controversy in inclusive B decays 9 May 2010 . the experimental precision especially in inclusive calculations and various ratios . Instead, an inclusive B meson decay into a photon plus any This effective field theory approach serves as a theoretical framework for both. Radiative and Electroweak Penguin Decays of B Mesons - KEK Theoretical predictions for the weak decay b ? ul? are subject to the con-tributions of . nomenological calculations. One such term that arises at . C++ and to say the words "inclusive charmless semileptonic B decay" ten times fast. Finally, on a . 2.2.3 Effective Field Theories . 4.1 Birth, Life, and Death of the B Meson . Present status of inclusive rare B decays ?