

B -particle organization

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NODE=S741205

Many measurements of B decays involve admixtures of B hadrons. Previously we arbitrarily included such admixtures in the B^\pm section, but because of their importance we have created two new sections: “ B^\pm/B^0 Admixture” for $\Upsilon(4S)$ results and “ $B^\pm/B^0/B_s^0/b$ -baryon Admixture” for results at higher energies. Most inclusive decay branching fractions and χ_b at high energy are found in the Admixture sections. $B^0\text{-}\bar{B}^0$ mixing data are found in the B^0 section, while $B_s^0\text{-}\bar{B}_s^0$ mixing data and $B\text{-}\bar{B}$ mixing data for a B^0/B_s^0 admixture are found in the B_s^0 section. CP -violation data are found in the B^\pm , B^0 , and $B^\pm B^0$ Admixture sections. b -baryons are found near the end of the Baryon section. Recently, we also created a new section: “ V_{cb} and V_{ub} CKM Matrix Elements.”

The organization of the B sections is now as follows, where bullets indicate particle sections and brackets indicate reviews.

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[Production and Decay of b -flavored Hadrons]

[A Short Note on HFLAV Activities]

• B^\pm

mass, mean life
 branching fractions
 polarization in B^\pm decay
 CP violation

• B^0

mass, mean life
 branching fractions
 [Polarization in B decay]
 polarization in B^0 decay
 [$B\text{-}\bar{B}$ Mixing]
 $B^0\text{-}\bar{B}^0$ mixing
 CP violation

• $B^\pm B^0$ Admixture

branching fractions, CP violation
 CP violation

• $B^\pm/B^0/B_s^0/b$ -baryon Admixture

mean life
 production fractions
 branching fractions
 χ_b at high energy
 production fractions in hadronic Z decay

• V_{cb} and V_{ub} CKM Matrix Elements[Determination of V_{cb} and V_{ub}]

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• B^* , $B_1(5721)$, $B_J^*(5732)$, $B_2^*(5747)$, $B_J(5840)$, $B_J(5970)$

mass, width, branching fractions

• B_s^0

mass, mean life
 branching fractions
 polarization in B_s^0 decay
 $B_s^0\text{-}\bar{B}_s^0$ mixing

• B_s^* , $B_{s1}(5830)^0$, $B_{s2}^*(5840)^0$, $B_{sJ}^*(5850)$, $B_{sJ}(6063)^0$, $B_{sJ}(6114)^0$

mass, width, branching fractions

• B_c^\pm

mass, mean life
 branching fractions

• $B_c(2S)^\pm$

mass, branching fractions

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At the end of Baryon Listings:

- Λ_b
 - mass, mean life
 - branching fractions
- $\Lambda_b(5912)^0, \Lambda_b(5920)^0, \Lambda_b(6070)^0, \Lambda_b(6146)^0, \Lambda_b(6152)^0$
 - mass, width, branching fractions
- Σ_b
 - mass, width, branching fractions
- $\Sigma_b^*, \Sigma_b(6097)^+, \Sigma_b(6097)^-$
 - mass, width, branching fractions
- Ξ_b^0, Ξ_b^-
 - mass, mean life
 - branching fractions, P , CP violation
- $\Xi_b'(5935)^-, \Xi_b(5945)^0, \Xi_b(5955)^-, \Xi_b(6100)^-, \Xi_b(6227)^-, \Xi_b(6227)^0, \Xi_b(6327)^0, \Xi_b(6333)^0$
 - mass, width, branching fractions
- Ω_b^-
 - mass, mean life
 - branching fractions
- $\Omega_b(6316)^-, \Omega_b(6330)^-, \Omega_b(6340)^-, \Omega_b(6350)^-$
 - mass, width, branching fractions
- b -baryon Admixture
 - mean life
 - branching fractions

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