

B-particle organization

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 “ $B^\pm/B_s^0/B_s^0/b$ -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 - \overline{B}^0 mixing data are found in the B^0 section, while B_s^0 - \overline{B}_s^0 mixing data and B - \overline{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.

[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 - \overline{B} Mixing]

B^0 - \overline{B}^0 mixing

CP violation

- $B^\pm B^0$ Admixture

branching fractions, CP violation

CP violation

- $B^\pm/B_s^0/B_s^0/b$ -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}]

- 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
 - $B_s^0 - \bar{B}_s^0$ 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

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