

# $B$ decays to baryons

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# Papers

BABAR

Published

{Aubert:2007eb} {Aubert:2008if}  
{Aubert:2007eb} {Aubert:2008if}  
{Aubert:2009wn} {Aubert:2003ww}  
{Aubert:2006qx} {Aubert:2010zv}  
{Aubert:2004fy} {Aubert:2005gw}  
{Aubert:2007qea} {Aubert:2009ru}  
{Aubert:2004nb} {Aubert:2006mp}  
{Aubert:2006cp} {Aubert:2005cu}

Additional papers anticipated to be published in time to be included in the book: 4-6

Belle

Published

{Abe:2002er} {Gabyshev:2002dt}  
{Abe:2004zj} {Chistov:2005zb}  
{Tsai:2007pp} {Abe:2007gx}  
{Abe:2002tw} {Gabyshev:2002zq}  
{Zang:2003qw} {Abe:2004sr}  
{Xie:2005tf} {Abe:2005ib}  
{Park:2006uj} {Medvedeva:2007zz}  
{Wang:2003iz} {Abe:2002ds}  
{Wang:2003yi} {Lee:2004mg}  
{Lee:2005fba} {Wang:2007a}  
{Chen:2008jy} {Chang:2008yw}  
{Chen:2009xg}  
+ 3 not yet in bibfile

Additional papers anticipated to be published in time to be included in the book: 1-2

# Section layout

section{ **$B$  decays to baryons}**}

subsection{**Two-body decays**}

subsubsection{**Theoretical predictions**}

subsubsection{**Experimental results and interpretation**}

should include BABAR+Belle analyses but also results from others (CLEO, CDF...)

subsection{**Decays to baryon anti-baryon plus mesons**}

subsubsection{**Theoretical models and graphology**}

subsubsection{**Experimental results**}

exclusive  $b \rightarrow c$ , rare decays  $b \rightarrow u$ , and penguins

subsubsection{**Baryon-anti-baryon mass distributions and angular correlations**}

incl. threshold enhancements

subsection{**Inclusive decays into baryons**}

subsection{**Semileptonic decays with a baryon anti-baryon pair**}

Planned: 2-4 tables and 10-20 figures

Approximate expected # pages: **12–14**

# Inter-correlation

Tools: 6 B-meson reconstruction:

possibly:

Tools: 12 Systematic error estimation

B-physics: 14.3 Hadronic B to charm decays  
14.4 Charmless B decays

Charm physics: 16.4 Charmed baryon spectroscopy and decay

where goes  $\Delta E/m_{ES}$  correlations? alternative to  $\Delta E: m_{inv}$ ?

Foreseen resolution:

cross-referencing?

wait and see, coordinate w/sect.editors at second iteration

# Contributors

besides section editors:

BABAR: not yet decided

Belle: Hiromichi Kichimi ( $b \rightarrow c$ , unconfirmed)