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## Measurement of the $B^0$ and $B^+$ meson lifetimes with fully reconstructed hadronic final states

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graphicx dcolumn amsmath epsfig

xspace

relsize

$\eta'$

$D^* D^{**} D^{*+} D^{*-} D^{*0}$

$\rightarrow \eta \pi^+ \pi^- \rightarrow \rho^0 \gamma$

$B^0 \rightarrow K_S^0 B^0 \rightarrow K^0$

$TeV GeV MeV keV eV GeV/c MeV/c GeV/c^2 MeV/c^2$

(stat) (syst)

$^{-1} d-0.1 em E/dx \chi^2 m - mL$

$\alpha_s \overline{MS} A_{\overline{MS}}$

$\theta_w \bar{\theta}_w [1] A_{FB}^1 [1] g_V^1 [1] g_A^1 [1] \bar{g}_V^1 [1] \bar{g}_A^1$

$f_D f_{D_s} f_B f_{B_d} f_{B_s} B_B \hat{B}_{B_d} \hat{B}_{B_s} \hat{B}_B \hat{B}_{B_d} \hat{B}_{B_s} \hat{B}_K \Lambda_{QCD}$

[1]Section sec:1 [1]Section subsec:1 [1]Figure fig:1 [1]Table tab:1

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[1] **1** [1] **B 1** [1] Nucl. Phys. Proc. Suppl. **1** [1] Nucl. Phys. A Proc. Suppl. **1** [1] Nucl. Phys. B Proc. Suppl. **1**

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[1] hep-ex/1 [1] hep-ph/1 [1] hep-th/1

$\Delta m \Delta E$

$B^0 \rightarrow D^{*-} \pi^+ B^0 \rightarrow D^{*-} \rho^+ B^0 \rightarrow D^{*-} a_1^+ B^0 \rightarrow D^- \pi^+ B^0 \rightarrow D^- \rho^+ B^0 \rightarrow D^- a_1^+ B^0 \rightarrow D^{*+} D^{*-}$

$B^+ \rightarrow \bar{D}^0 \pi^+ B^+ \rightarrow \bar{D}^0 \rho^+ B^+ \rightarrow \bar{D}^0 a_1^+$

$B^+ \rightarrow \bar{D}^{*0} \pi^+ B^+ \rightarrow \bar{D}^{*0} \rho^+ B^+ \rightarrow \bar{D}^{*0} a_1^+$

$D^{*-} \pi^+ D^{*-} \rho^+ D^0 \rightarrow K^- \pi^+ D^0 \rightarrow K^- \pi^+ \pi^0 D^0 \rightarrow K^- \pi^+ \pi^- \pi^+ D^0 \rightarrow K^- \pi^+ \pi^- \pi^+ \pi^0 D^0 \rightarrow K_S^0 \pi^+ \pi^- D^0 \rightarrow K_S^0 \pi^+ \pi^- \pi^0 \bar{K}^{*0} \pi^0 K^{*-}$

*et al.*

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$\Delta E B_{\text{rec}} B_{\text{opp}} B_{\text{CP}} B_{\text{TAG}}$

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**Measurement of the  $B^0$  and  $B^+$  meson lifetimes with fully reconstructed hadronic final states**

**center The BABAR Collaboration**