

Douglas Alan Roberts

Assistant Professor of Physics

Department of Physics
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EDUCATION

University of California at Los Angeles, Los Angeles, CA ■ 1994

Ph.D. in Physics

Dissertation: "The First Search for the Rare Decay $K_L^0 \rightarrow p^0 p^0 g$ "

Thesis Advisor: Professor Katsushi Arisaka

University of California at Los Angeles, Los Angeles, CA ■ 1993

M.S. in Physics

California Institute of Technology, Pasadena, CA ■ 1988

B.S. with Honors in Physics

EMPLOYMENT

Assistant Professor ■ 1998 — present

Department of Physics

University of Maryland, College Park, MD

Assistant Research Physicist ■ 1996 — 1998

Department of Physics

University of California at Santa Barbara, Santa Barbara, CA

Postdoctoral Research Fellow ■ 1994 — 1996

Department of Physics

University of California at Santa Barbara, Santa Barbara, CA

Research Assistant ■ 1989 — 1994

Department of Physics

University of California at Los Angeles, Los Angeles, CA

Teaching Assistant ■ 1988 — 1989

Department of Physics

University of California at Los Angeles, Los Angeles, CA

COURSES TAUGHT AT THE UNIVERSITY OF MARYLAND

1998	Fall	PHYS 102	The Physics of Music
1999	Fall	PHYS 102	The Physics of Music
2000	Spring	PHYS 401	Quantum Physics I
2000	Fall	PHYS 102 GEMS 296	The Physics of Music Team Project Seminar I (Gemstone)
2001	Spring	PHYS 401 GEMS 297	Quantum Physics I Team Project Seminar II (Gemstone)
2001	Fall	PHYS 115 GEMS 396	Inquiry Into Physics Team Project Seminar III (Gemstone)
2002	Spring	PHYS 115 GEMS 397	Inquiry Into Physics Team Project Seminar IV (Gemstone)
2002	Fall	PHYS 375 GEMS 496	Experimental Physics III Project Writing Seminar (Gemstone)
2003	Spring	PHYS 115 GEMS 497	Inquiry Into Physics Team Thesis Defense (Gemstone)

PH.D. STUDENTS AND POSTDOCS

Postdocs

2002—Present	Wouter Hulsbergen (w/ Hassan Jawahery)	<i>BABAR</i> at SLAC
1999—2001	Jochen Schieck	<i>BABAR</i> at SLAC

Ph.D. Students

2001—Present	Chung Khim Lae	<i>BABAR</i> at SLAC
1999—Present	Vincent (Bram) Lillard	<i>BABAR</i> at SLAC

PHYSICS DEPARTMENT COMMITTEE SERVICE

Academic Year

2002—2003	Colloquium Committee (joint with Alex Dragt) Physics Council Lab Committee (<i>de facto</i> as PHYS 375 instructor)
2001—2002	Colloquium Committee (joint with Steve Wallace) Salary Committee

2000—2001 Salary Committee
 Physics Council

1999—2000 Physics Council

UNIVERSITY SERVICE

Academic Year

2002—2003 Senate Academic Procedures and Standards Committee
 T.E.N.T.S. (Terrapin Expeditions for New and Transfer Students)

2001—2002 Senate Academic Procedures and Standards Committee

OUTREACH ACTIVITIES

1998 Evaluator: Intel Science Talent Search

1999 Faculty Representative: University of Maryland Physics Olympics
 Evaluator: Intel Science Talent Search

2000 Faculty Representative: University of Maryland Physics Olympics
 Evaluator: Discovery Young Scientist Challenge
 Evaluator: Intel Science Talent Search

2001 Faculty Representative: University of Maryland Physics Olympics
 Evaluator: Discovery Young Scientist Challenge
 Evaluator: Intel Science Talent Search

2002 Faculty Representative: University of Maryland Physics Olympics

AWARDS

- Hertz Fellowship, Lawrence Livermore National Laboratory, Summer 1987

CONFERENCE TALKS

"Recent Results from BaBar on B Decays to Double-Charm and EW Penguins",
XXXVIth Rencontres de Moriond, Les Arcs, France, March, 2001.

"The BaBar Silicon Vertex Tracker", **VERTEX '97**, Rio de Janeiro, Brazil, September, 1997, published in "Proceedings of the 6th International Workshop on Vertex Detectors", ed. E. d. C. e. Silva and R. C. Shellard.

"Search for the Decays $B^0 \rightarrow D^{(*)+}D^{(*)-}$ and $B^+ \rightarrow \text{anti-}D^0K^+$ ", **DPF '96**, Minneapolis, Minnesota, August, 1996.

"New Measurements of Rare K_L^0 and π^0 Decays from Fermilab E799", **XXVIIIth Rencontres de Moriond**, Les Arcs, France, March, 1993, Published in "Proceedings of the XXVIIIth RENCONTRE DE MORIOND", ed. J. T. T. Vãn.

SEMINARS AND COLLOQUIA

"CP Violation in the B Meson System with the BaBar Detector at SLAC", *Colloquium*, The Catholic University of America, January, 2002.

"New Results from BaBar", *Colloquium*, University of Maryland, September, 2001.

"Recent Results from BaBar", *Seminar*, Brookhaven National Laboratory, September, 2000.

"Recent Results from BaBar", *Seminar*, University of Maryland, September, 2000.

"Studying CP Violation with the BaBar Detector at SLAC", *Colloquium*, University of South Carolina, March, 1998.

"On The Road To Studying CP Violation In The B System: Recent CLEO-II Results For $B^0 \rightarrow D^{(*)+}D^{(*)-}$ And Future Prospects At BaBar", *Seminar*, University of Maryland, November, 1998.

"On The Road To Studying CP Violation In The B System: Recent CLEO-II Results For $B^0 \rightarrow D^{(*)+}D^{(*)-}$ And Future Prospects At BaBar", *Seminar*, Stanford Linear Accelerator Center, November, 1997.

"The First Search for the Decay $K_L^0 \rightarrow \pi^0\pi^0\gamma$ ", *Seminar*, University of Colorado, April, 1993.

"The First Search for the Decay $K_L^0 \rightarrow \pi^0\pi^0\gamma$ ", *Seminar*, University of California, Santa Barbara, August, 1993.

PUBLICATIONS

- B. Aubert, *et al.*, "Measurement of branching fractions and CP-violating asymmetries in $B^0 \rightarrow \pi^+\pi^-, K^+\pi^-, K^+K^-$ decays", Phys. Rev. Lett. **89**, 281802 (2002).
- B. Aubert, *et al.*, "Measurement of the CP-violating asymmetry amplitude $\sin 2\beta$ ", Phys. Rev. Lett. **89**, 201802 (2002).
- B. Aubert, *et al.*, "Study of $B^{+/-} \rightarrow J/\psi \pi^{+/-}$ and $B^{+/-} \rightarrow J/\psi K^{+/-}$ decays: Measurement of the ratio of branching fractions and search for direct CP-violating charge asymmetries", Phys. Rev. **D65**, 091101 (2002).
- B. Aubert, *et al.*, "Measurement of the branching fraction and CP content for the decay $B^0 \rightarrow D^{*+}D^{*-}$ ", Phys. Rev. Lett. **89**, 061801 (2002).
- B. Aubert, *et al.*, "Search for T and CP violation in B^0 anti- B^0 mixing with inclusive dilepton events", Phys. Rev. Lett. **88** (2002).
- B. Aubert, *et al.*, "Measurement of the B^0 lifetime with partially reconstructed $B^0 \rightarrow D^{*+}l^+ \nu_l$ decays", Phys. Rev. Lett. **89**, 011802 (2002).
- B. Aubert, *et al.*, "Measurement of D_S^+ and D_S^{*+} production in B meson decays and from continuum e^+e^- annihilation at $\sqrt{s} = 10.6$ GeV", Phys. Rev. **D65**, 091104 (2002).
- B. Aubert, *et al.*, "A study of the time dependent CP-violating asymmetries and flavor oscillations in neutral B decays at the $\Upsilon(4S)$ ", Phys. Rev. **D66**, 032003 (2002).
- B. Aubert, *et al.*, "Search for the rare decays $B \rightarrow Kl^+l^-$ and $B \rightarrow K^*l^+l^-$ ", Phys. Rev. Lett. **88**, 241801 (2002).
- B. Aubert, *et al.*, "Measurement of the B^0 anti- B^0 oscillation frequency with inclusive dilepton events", Phys. Rev. Lett. **88**, 221803 (2002).
- B. Aubert, *et al.*, "Measurement of B^0 anti- B^0 flavor oscillations in hadronic B^0 decays", Phys. Rev. Lett. **88**, 221802 (2002).
- B. Aubert, *et al.*, "Direct CP violations searches in charmless hadronic B meson decays", Phys. Rev. **D65**, 051101 (2002).
- B. Aubert, *et al.*, "Measurement of $B \rightarrow K^*\gamma$ branching fractions and charge asymmetries", Phys. Rev. Lett. **88**, 101805 (2002).
- B. Aubert, *et al.*, "Study of CP-violating asymmetries in $B^0 \rightarrow \pi^+\pi^-, K^+\pi^-$ decays", Phys. Rev. **D65**, 051502 (2002).
- B. Aubert, *et al.*, "Measurement of the branching fractions for $\psi(2S) \rightarrow e^+e^-$ and $\psi(2S) \rightarrow \mu^+\mu^-$ ", Phys. Rev. **D65**, 031101 (2002).

- B. Aubert, *et al.*, "Measurement of branching fractions for exclusive B decays to charmonium final states", Phys. Rev. **D65**, 032001 (2002).
- B. Aubert, *et al.*, "The BaBar Detector", Nucl. Instrum. Meth. **A479**, 1 (2002).
- V. Re, *et al.*, "The Babar Silicon-Vertex Tracker: Performance, Running Experience, and Radiation Damage Studies", IEEE Trans. Nucl. Sci. **49**, 3284 (2002).
- V. Re, *et al.*, "The BaBar silicon vertex tracker, performance and running experience", Nucl. Instrum. Meth. **A485**, 10 (2002).
- B. Aubert, *et al.*, "Measurements of the branching fractions of exclusive charmless B meson decays with η' or ω mesons", Phys. Rev. Lett. **87**, 221802 (2001).
- B. Aubert, *et al.*, "Search for the decay $B^0 \rightarrow \gamma\gamma$ ", Phys. Rev. Lett. **87**, 241803 (2001).
- B. Aubert, *et al.*, "Measurement of the $B \rightarrow J/\psi K^*(892)$ decay amplitudes", Phys. Rev. Lett. **87**, 241801 (2001).
- B. Aubert, *et al.*, "Measurement of the B^0 and B^+ meson lifetimes with fully reconstructed hadronic final states", Phys. Rev. Lett. **87**, 201803 (2001).
- B. Aubert, *et al.*, "Observation of CP violation in the B^0 meson system", Phys. Rev. Lett. **87**, 091801 (2001).
- B. Aubert, *et al.*, "Measurement of J/ψ production in continuum $e^+ e^-$ annihilations near $\sqrt{s} = 10.6$ GeV", Phys. Rev. Lett. **87**, 162002 (2001).
- B. Aubert, *et al.*, "Measurement of branching fractions and search for CP-violating charge asymmetries in charmless two-body B decays into pions and kaons", Phys. Rev. Lett. **87**, 151802 (2001).
- B. Aubert, *et al.*, "Measurement of the decays $B \rightarrow \phi K$ and $B \rightarrow \phi K^*$ ", Phys. Rev. Lett. **87**, 151801 (2001).
- B. Aubert, *et al.*, "Measurement of CP violating asymmetries in B^0 decays to CP eigenstates", Phys. Rev. Lett. **86**, 2515 (2001).
- C. Bozzi, *et al.*, "First-year experience with the BaBar silicon vertex tracker", Nucl. Instrum. Meth. **A473**, 7 (2001).
- C. Bozzi, *et al.*, "The BaBar silicon vertex tracker", Nucl. Instrum. Meth. **A461**, 162 (2001).
- S. Chan, *et al.*, "A measurement of the decay asymmetry parameters in $\chi_c^0 \rightarrow \chi^- \pi^+$ ", Phys. Rev. **D63**, 111102 (2001).
- D. M. Asner, *et al.*, "Hadronic structure in the decay $\tau \rightarrow \nu_\tau \pi^- \pi^0 \pi^0$ and the sign of the tau neutrino helicity", Phys. Rev. **D61**, 012002 (2000).

- M. Athanas, *et al.*, "Limit on tau-neutrino mass from $\tau^- \rightarrow \pi^- \pi^+ \pi^- \pi^0 \nu_\tau$ ", Phys. Rev. **D61**, 052002 (2000).
- B. H. Behrens, *et al.*, "Measurement of $B \rightarrow \rho l \nu$ decay and $|V(ub)|$ ", Phys. Rev. **D61**, 052001 (2000).
- C. Bozzi, *et al.*, "The design and construction of the BaBar silicon vertex tracker", Nucl. Instrum. Meth. **A447**, 15 (2000).
- C. Bozzi, *et al.*, "The BaBar silicon vertex tracker", Nucl. Instrum. Meth. **A453**, 78 (2000).
- G. Brandenburg, *et al.*, "Charged track multiplicity in B meson decay", Phys. Rev. **D61**, 072002 (2000).
- R. A. Briere, *et al.*, "Rare decays of the η ", Phys. Rev. Lett. **84**, 26 (2000).
- J. P. Alexander, *et al.*, "Evidence of new states decaying into $\Xi_c^* \pi$ ", Phys. Rev. Lett. **83**, 3390 (1999).
- A. Anastassov, *et al.*, "First observations of $\Upsilon(1S) \rightarrow \gamma \pi^+ \pi^-$ and $\Upsilon(1S) \rightarrow \gamma \pi^0 \pi^0$ ", Phys. Rev. Lett. **82**, 286 (1999).
- M. Artuso, *et al.*, "First observation of the decay $B^0 \rightarrow D^{*+} D^{*-}$ ", Phys. Rev. Lett. **82**, 3020 (1999).
- J. Bartelt, *et al.*, "Measurement of the $B \rightarrow D l \nu$ branching fractions and form factor", Phys. Rev. Lett. **82**, 3746 (1999).
- M. Bishai, *et al.*, "First observation of the decay $\tau^- \rightarrow K^{*-} \eta \nu_\tau$ ", Phys. Rev. Lett. **82**, 281 (1999).
- G. Bonvicini, *et al.*, "Measurement of charm meson lifetimes", Phys. Rev. Lett. **82**, 4586 (1999).
- C. Bozzi, *et al.*, "The BaBar silicon vertex tracker", Nucl. Instrum. Meth. **A435**, 25 (1999).
- T. E. Coan, *et al.*, "Search for exclusive rare baryonic decays of B mesons", Phys. Rev. **D59**, 111101 (1999).
- K. W. Edwards, *et al.*, "Measurement of the mass splittings between the b anti-b $\chi_b J(1P)$ states", Phys. Rev. **D59**, 032003 (1999).
- S. Glenn, *et al.*, "Upsilon dipion transitions at energies near the $\Upsilon(4S)$ ", Phys. Rev. **D59**, 052003 (1999).
- R. Godang, *et al.*, "Search for baryon and lepton number violating decays of the tau lepton", Phys. Rev. **D59**, 091303 (1999).
- C. P. Jessop, *et al.*, "Observation of two narrow states decaying into $\Xi_c^+ \gamma$ and $\Xi_c^0 \gamma$ ", Phys. Rev. Lett. **82**, 492 (1999).

- S. J. Richichi, *et al.*, "Study of 3-prong hadronic τ decays with charged kaons", Phys. Rev. **D60**, 112002 (1999).
- M. S. Alam, *et al.*, "Further search for the two-photon production of the glueball candidate $f_J(2220)$ ", Phys. Rev. Lett. **81**, 3328 (1998).
- M. S. Alam, *et al.*, "Measurement of the branching fractions of $\Lambda_b/c^+ \rightarrow p \text{ anti-K} n(\pi)$ ", Phys. Rev. **D57**, 4467 (1998).
- J. P. Alexander, *et al.*, "The hadronic transitions $\Upsilon(2S) \rightarrow \Upsilon(1S)$ ", Phys. Rev. **D58**, 052004 (1998).
- R. Ammar, *et al.*, "A limit on the mass of the ν_τ ", Phys. Lett. **B431**, 209 (1998).
- R. Ammar, *et al.*, "Measurement of the total cross section for $e^+e^- \rightarrow \text{hadrons}$ at $\sqrt{s} = 10.52 \text{ GeV}$ ", Phys. Rev. **D57**, 1350 (1998).
- A. Anastassov, *et al.*, "Investigation of semileptonic B meson decay to P-wave charm mesons", Phys. Rev. Lett. **80**, 4127 (1998).
- S. Anderson, *et al.*, "First search for CP violation in tau lepton decay", Phys. Rev. Lett. **81**, 3823 (1998).
- K. Arisaka, *et al.*, "Search for the lepton-family number violating decays $K_L \rightarrow \pi^0 \mu^\pm e^\pm$ ", Phys. Lett. **B432**, 230 (1998).
- M. Artuso, *et al.*, "Measurement of $\text{Br}(D^0 \rightarrow K^- \pi^+)$ using partial reconstruction of anti-B $\rightarrow D^{*+} X \text{ anti-}\nu$ ", Phys. Rev. Lett. **80**, 3193 (1998).
- D. M. Asner, *et al.*, "Radiative decay modes of the D^0 meson", Phys. Rev. **D58**, 092001 (1998).
- M. Athanas, *et al.*, "First observation of the Cabibbo suppressed decay $B^+ \rightarrow \text{anti-}D^0 K^+$ ", Phys. Rev. Lett. **80**, 5493 (1998).
- J. Bartelt, *et al.*, "Observation of the radiative decay $D^{*+} \rightarrow D^+ \gamma$ ", Phys. Rev. Lett. **80**, 3919 (1998).
- B. H. Behrens, *et al.*, "Two-body B meson decays to η and η' : Observation of $B \rightarrow \eta' K$ ", Phys. Rev. Lett. **80**, 3710 (1998).
- T. Bergfeld, *et al.*, "Observation of $B^+ \rightarrow \omega K^+$ and search for related B decay modes", Phys. Rev. Lett. **81**, 272 (1998).
- M. Bishai, *et al.*, "Search for the decay $B \rightarrow D_{s1}(2536)^+ X$ ", Phys. Rev. **D57**, 3847 (1998).
- D. W. Bliss, *et al.*, "New limits for neutrinoless tau decays", Phys. Rev. **D57**, 5903 (1998).

- G. Bonvicini, *et al.*, "Study of semileptonic decays of B mesons to charmed baryons", Phys. Rev. **D57**, 6604 (1998).
- G. Brandenburg, *et al.*, "Continuum charged D^* spin alignment at $\sqrt{s} = 10.5$ GeV", Phys. Rev. **D58**, 052003 (1998).
- G. Brandenburg, *et al.*, "A new measurement of $B \rightarrow D^* \pi$ branching fractions", Phys. Rev. Lett. **80**, 2762 (1998).
- T. E. Browder, *et al.*, "Observation of high momentum η' production in B decay", Phys. Rev. Lett. **81**, 1786 (1998).
- M. Chadha, *et al.*, "Improved measurement of the pseudoscalar decay constant f_{D_s} ", Phys. Rev. **D58**, 032002 (1998).
- T. E. Coan, *et al.*, "Flavor-specific inclusive B decays to charm", Phys. Rev. Lett. **80**, 1150 (1998).
- S. Glenn, *et al.*, "Search for inclusive $b \rightarrow s l^+ l^-$ ", Phys. Rev. Lett. **80**, 2289 (1998).
- R. Godang, *et al.*, "Observation of exclusive two-body B decays to kaons and pions", Phys. Rev. Lett. **80**, 3456 (1998).
- J. Gronberg, *et al.*, "Measurements of the meson photon transition form factors of light pseudoscalar mesons at large momentum transfer", Phys. Rev. **D57**, 33 (1998).
- C. P. Jessop, *et al.*, "Measurement of the branching ratios for the decays of D_s^+ to $\eta\pi^+$, $\eta'\pi^+$, $\eta\rho^+$, and $\eta'\rho^+$ ", Phys. Rev. **D58**, 052002 (1998).
- B. Nemati, *et al.*, "Search for color-suppressed B hadronic decay processes with CLEO", Phys. Rev. **D57**, 5363 (1998).
- M. S. Alam, *et al.*, "Study of gluon versus quark fragmentation in $\Upsilon \rightarrow g g \gamma$ and $e^+ e^- \rightarrow q \text{ anti-}q \gamma$ events at $\sqrt{s} = 10$ GeV", Phys. Rev. **D56**, 17 (1997).
- J. P. Alexander, *et al.*, "Determination of the Michel parameters and the tau neutrino helicity in tau decay", Phys. Rev. **D56**, 5320 (1997).
- R. Ammar, *et al.*, "A measurement of the Michel parameters in leptonic decays of the tau", Phys. Rev. Lett. **78**, 4686 (1997).
- R. Ammar, *et al.*, "Study of flavor-tagged baryon production in B decay", Phys. Rev. **D55**, 13 (1997).
- A. Anastassov, *et al.*, "Experimental tests of lepton universality in tau decay", Phys. Rev. **D55**, 2559 (1997).
- S. Anderson, *et al.*, "Study of the decay $\tau^- \rightarrow 2\pi^- \pi^+ 3\pi^0 \nu_\tau$ ", Phys. Rev. Lett. **79**, 3814 (1997).

- S. Anderson, *et al.*, " Λ anti- Λ production in two-photon interactions at CLEO", Phys. Rev. **D56**, 2485 (1997).
- M. Artuso, *et al.*, "Study of the B^0 semileptonic decay spectrum at the $\Upsilon(4S)$ resonance", Phys. Lett. **B399**, 321 (1997).
- D. M. Asner, *et al.*, "Search for the decays $B^0 \rightarrow D^{(*)+}D^{(*)-}$ ", Phys. Rev. Lett. **79**, 799 (1997).
- M. Athanas, *et al.*, "Measurement of the anti- $B \rightarrow D$ I anti- ν partial width and form factor parameters", Phys. Rev. Lett. **79**, 2208 (1997).
- P. Avery, *et al.*, "Search for ϕ mesons in tau lepton decay", Phys. Rev. **D55**, 1119 (1997).
- R. Balest, *et al.*, "Observation of the decay $D_s^+ \rightarrow \omega\pi^+$ ", Phys. Rev. Lett. **79**, 1436 (1997).
- B. Barish, *et al.*, "First observation of inclusive B decays to the charmed strange baryons Ξ_c^0 and Ξ_c^+ ", Phys. Rev. Lett. **79**, 3599 (1997).
- J. Bartelt, *et al.*, "Studies of the Cabibbo-suppressed decays $D^+ \rightarrow \pi^0 l^+ \nu$ and $D^+ \rightarrow \eta e^+ \nu_e$ ", Phys. Lett. **B405**, 373 (1997).
- T. Bergfeld, *et al.*, "First observation of $\tau \rightarrow 3\pi \eta \nu_\tau$ and $\tau \rightarrow f_1 \pi \nu_\tau$ decays", Phys. Rev. Lett. **79**, 2406 (1997).
- M. Bishai, *et al.*, "Analyses of $D^+ \rightarrow K_S^0 K^+$ and $D^+ \rightarrow K_S^0 \pi^+$ ", Phys. Rev. Lett. **78**, 3261 (1997).
- G. Bonvicini, *et al.*, "Search for neutrinoless tau decays involving π^0 or η mesons", Phys. Rev. Lett. **79**, 1221 (1997).
- G. Brandenburg, *et al.*, "Observation of two excited charmed baryons decaying into $\Lambda_c^+ \pi^\pm$ ", Phys. Rev. Lett. **78**, 2304 (1997).
- T. E. Browder, *et al.*, "A new upper limit on the decay $\eta \rightarrow e^+ e^-$ ", Phys. Rev. **D56**, 5359 (1997).
- T. E. Browder, *et al.*, "Search for $B \rightarrow \mu \text{ anti-}\nu_\mu \gamma$ and $B \rightarrow e \text{ anti-}\nu_e \gamma$ ", Phys. Rev. **D56**, 11 (1997).
- T. E. Coan, *et al.*, "Tau neutrino helicity from h^\pm energy correlations", Phys. Rev. **D55**, 7291 (1997).
- K. W. Edwards, *et al.*, "Search for the decay $\tau^- \rightarrow 4\pi^- 3\pi^+ (\pi^0) \nu_\tau$ ", Phys. Rev. **D56**, 5297 (1997).
- K. W. Edwards, *et al.*, "Search for neutrinoless τ decays: $\tau \rightarrow e \gamma$ and $\tau \rightarrow \mu \gamma$ ", Phys. Rev. **D55**, 3919 (1997).

- X. Fu, *et al.*, "Observation of exclusive B decays to final states containing a charmed baryon", Phys. Rev. Lett. **79**, 3125 (1997).
- L. Gibbons, *et al.*, "The inclusive decays $B \rightarrow D X$ and $B \rightarrow D^* X$ ", Phys. Rev. **D56**, 3783 (1997).
- R. Godang, *et al.*, "Limit on the two-photon production of the glueball candidate $f_J(2220)$ at CLEO", Phys. Rev. Lett. **79**, 3829 (1997).
- C. P. Jessop, *et al.*, "Measurement of the decay amplitudes and branching fractions of $B \rightarrow J/\psi K^*$ and $B \rightarrow J/\psi K$ decays", Phys. Rev. Lett. **79**, 4533 (1997).
- B. Nemati, *et al.*, "Measurement of the direct photon spectrum in $\Upsilon(1S)$ decays", Phys. Rev. **D55**, 5273 (1997).
- M. S. Alam, *et al.*, "Tau decays into three charged leptons and two neutrinos", Phys. Rev. Lett. **76**, 2637 (1996).
- J. P. Alexander, *et al.*, "First measurement of the $B \rightarrow \pi l \nu$ and $B \rightarrow \rho(\omega) l \nu$ branching fractions", Phys. Rev. Lett. **77**, 5000 (1996).
- J. P. Alexander, *et al.*, "Observation of the Cabibbo suppressed charmed baryon decay $\Lambda_c^+ \rightarrow p \phi$ ", Phys. Rev. **D53**, 1013 (1996).
- M. Artuso, *et al.*, "Measurement of the branching fraction for $D_s^- \rightarrow \phi \pi^-$ ", Phys. Lett. **B378**, 364 (1996).
- D. M. Asner, *et al.*, "Analysis of $D^0 \rightarrow K \text{ anti-K } X$ decays", Phys. Rev. **D54**, 4211 (1996).
- D. M. Asner, *et al.*, "Search for exclusive charmless hadronic B decays", Phys. Rev. **D53**, 1039 (1996).
- R. Balest, *et al.*, "Measurement of the tau lepton lifetime", Phys. Lett. **B388**, 402 (1996).
- B. Barish, *et al.*, "A Measurement of $\text{Br}(D^0 \rightarrow K^- \pi^+ \pi^0)/\text{Br}(D^0 \rightarrow K^- \pi^+)$ ", Phys. Lett. **B373**, 334 (1996).
- B. Barish, *et al.*, "Measurements of the B semileptonic branching fraction with lepton tags", Phys. Rev. Lett. **76**, 1570 (1996).
- J. Bartelt, *et al.*, "First observation of the decay $\tau^- \rightarrow K^- \eta \nu_\tau$ ", Phys. Rev. Lett. **76**, 4119 (1996).
- T. Bergfeld, *et al.*, "A search for non-resonant $B^+ \rightarrow h^+ h^- h^+$ decays", Phys. Rev. Lett. **77**, 4503 (1996).
- T. Bergfeld, *et al.*, "Observation of the Ξ_c^+ charmed baryon decays to $\Sigma^+ K^- \pi^+$, Σ^+ anti- K^{*0} , and $\Lambda K^- \pi^+ \pi^+$ ", Phys. Lett. **B365**, 431 (1996).
- M. Bishai, *et al.*, "Study of $B \rightarrow \psi \rho$ ", Phys. Lett. **B369**, 186 (1996).

- T. E. Coan, *et al.*, "Decays of tau leptons to final states containing K_S^0 mesons", Phys. Rev. **D53**, 6037 (1996).
- J. E. Duboscq, *et al.*, "Measurement of the form-factors for $\text{anti-B}^0 \rightarrow D^{*+} l^- \text{anti-}\nu$ ", Phys. Rev. Lett. **76**, 3898 (1996).
- K. W. Edwards, *et al.*, "Observation of new decay modes of the charmed strange baryon Ξ_c^+ ", Phys. Lett. **B373**, 261 (1996).
- A. Freyberger, *et al.*, "Limits on flavor changing neutral currents in D^0 meson decays", Phys. Rev. Lett. **76**, 3065 (1996).
- D. Gibaut, *et al.*, "Measurements of $B \rightarrow D_s^+ X$ decays", Phys. Rev. **D53**, 4734 (1996).
- L. Gibbons, *et al.*, "Observation of an excited charmed baryon decaying into $\Xi_c^0 \pi^+$ ", Phys. Rev. Lett. **77**, 810 (1996).
- P. Gu, *et al.*, "First evidence for the decay $K_L \rightarrow e^+ e^- \mu^+ \mu^-$ ", Phys. Rev. Lett. **76**, 4312 (1996).
- Y. Kubota, *et al.*, "Measurements of the inclusive semielectronic D^0 branching fraction", Phys. Rev. **D54**, 2994 (1996).
- M. Artuso, *et al.*, "A Search for $B \rightarrow \text{lepton anti-lepton-neutrino}$ ", Phys. Rev. Lett. **75**, 785 (1995).
- P. Avery, *et al.*, "Observation of a narrow state decaying into $\Xi_c^+ \pi^-$ ", Phys. Rev. Lett. **75**, 4364 (1995).
- R. Balest, *et al.*, "Measurements of the decays $\tau \rightarrow h^- h^+ h^- \nu_\tau$ and $\tau \rightarrow h^- h^+ h^- \pi^0 \nu_\tau$ ", Phys. Rev. Lett. **75**, 3809 (1995).
- J. Bartelt, *et al.*, "Search for CP violation in D^0 decay", Phys. Rev. **D52**, 4860 (1995).
- G. Brandenburg, *et al.*, "Measurements of the ratios $\text{Br}(D_s^+ \rightarrow \eta l^+ \nu)/\text{Br}(D_s^+ \rightarrow \phi l^+ \nu)$ and $\text{Br}(D_s^+ \rightarrow \eta' l^+ \nu)/\text{Br}(D_s^+ \rightarrow \phi l^+ \nu)$ ", Phys. Rev. Lett. **75**, 3804 (1995).
- F. Butler, *et al.*, "Measurement of the ratio of branching fractions $\text{Br}(D^0 \rightarrow \pi^- e^+ \nu_e)/\text{Br}(D^0 \rightarrow K^- e^+ \nu_e)$ ", Phys. Rev. **D52**, 2656 (1995).
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