

PUBLICATIONS 2004-2005



ALEPH

Branching ratios and spectral functions of τ decays: final ALEPH measurements and physics implications

Schael S., Barate R., Brunelière R., De Bonis I., Décamp D., Goy C., Jézéquel S., Lees J.P., Martin F., Merle E., Minard M.N., Pietrzyk B., Trocmé B. et al, ALEPH Collaboration
Physics Reports 421 (2005) 191-284

Improved measurement of the triple-gauge-boson couplings gamma γWW and ZWW in e^+e^- collisions

Schael S., Barate R., Brunelière R., De Bonis I., Décamp D., Goy C., Jézéquel S., Lees J.P., Martin F., Merle E., Minard M.N., Pietrzyk B., Trocmé B. et al, ALEPH Collaboration
Physics Letters B 614 (2005) 7-26

Bose-Einstein correlations in W -pair decays with an event-mixing technique

Schael S., Barate R., Brunelière R., De Bonis I., Décamp D., Goy C., Jézéquel S., Lees J.P., Martin F., Merle E., Minard M.N., Pietrzyk B., Trocmé B. et al, ALEPH Collaboration
Physics Letters B 606 (2005) 265-275

Two-particle correlations in $p\bar{p}$, $\bar{p}p$ and $K_s^0\bar{K}_s^0$ pairs from hadronic Z decays

Schael S., Barate R., Brunelière R., De Bonis I., Décamp D., Goy C., Jézéquel S., Lees J.P., Martin F., Merle E., Minard M.N., Pietrzyk B., Trocmé B. et al, ALEPH Collaboration
Physics Letters B 611 (2005) 66-80

Single vector boson production in e^+e^- collisions at centre-of-mass energies from 183 to 209 GeV

Schael S., Barate R., Brunelière R., De Bonis I., Décamp D., Goy C., Jézéquel S., Lees J.P., Martin F., Merle E., Minard M.N., Pietrzyk B., Trocmé B. et al, ALEPH Collaboration
Physics Letters B 605 (2005) 49-62

Two-dimensional analysis of Bose-Einstein correlations in hadronic Z decays at LEP

Heister A., Barate R., Brunelière R., De Bonis I., Décamp D., Goy C., Jézéquel S., Lees J.P., Martin F., Merle E., Minard M.N., Pietrzyk B., Trocmé B. et al, ALEPH Collaboration
European Physical Journal C 36 (2004) 147-159

Studies of QCD at e^+e^- centre-of-mass energies between 91 and 209 GeV

Heister A., Barate R., Brunelière R., De Bonis I., Décamp D., Goy C., Jézéquel S., Lees J.P., Martin F., Merle E., Minard M.N., Pietrzyk B., Trocmé B. et al, ALEPH Collaboration
European Physical Journal C 35 (2004) 457-486

Constraints on anomalous QGC's in e^+e^- interactions from 183 to 209 GeV

Heister A., Barate R., Brunelière R., De Bonis I., Décamp D., Goy C., Jézéquel S., Lees J.P., Martin F., Merle E., Minard M.N., Pietrzyk B., Trocmé B. et al, ALEPH Collaboration
Physics Letters B 602 (2004) 31-40

Measurement of W -pair production in e^+e^- collisions at centre-of-mass energies from 183 to 209 GeV

Heister A., Barate R., Brunelière R., De Bonis I., Décamp D., Goy C., Jézéquel S., Lees J.P., Martin F., Merle E., Minard M.N., Pietrzyk B., Trocmé B. et al, ALEPH Collaboration
European Physical Journal C 38 (2004) 147-160

Absolute mass lower limit for the lightest neutralino of the MSSM from e^+e^- data at \sqrt{s} up to 209 GeV

Heister A., Barate R., Brunelière R., De Bonis I., Décamp D., Goy C., Jézéquel S., Lees J.P., Martin F., Merle E., Minard M.N., Pietrzyk B., Trocmé B. et al, ALEPH Collaboration
Physics Letters B 583 (2004) 247-263

Search for pentaquarks states in Z decays

Heister A., Barate R., Brunelière R., De Bonis I., Décamp D., Goy C., Jézéquel S., Lees J.P., Martin F., Merle E., Minard M.N., Pietrzyk B., Trocmé B. et al, ALEPH Collaboration
Physics Letters B 599 (2004) 1-16

AMS

A study of cosmic ray secondaries induced by the Mir Space Station using AMS-01

Aguilar M., Favier J., Fouque N., Hermel V., Kossakowski R., Vialle J.P. et al, AMS Collaboration
Nuclear Instruments and Methods in Physics Research B 234 (2005) 321-332

ATLAS

Development and construction of large size signal electrodes for the ATLAS electromagnetic calorimeter

Aubert B., Ballansat J., Colas J., Girard C., Jérémie A., Jézéquel S., Lesueur J., Sauvage G. et al, ATLAS Collaboration
Nuclear Instruments and Methods in Physics Research A 539 (2005) 558-594

Position resolution and particle identification with the ATLAS EM calorimeter

Colas J., Di Ciaccio L., El Kacimi M., Gaumer O., Gouanère M., Goujdami D., Lafaye R., Le Maner C., Neukermans L., Perrodo P., Poggioli L., Prieur D., Przysiezniak H., Sauvage G., Wingerter-Seez I., Zitoun R. et al, ATLAS Collaboration
Nuclear Instruments and Methods in Physics Research A 550 (2005) 96-115

BABAR

Search for the W-exchange decays $B^0 \rightarrow D_s^{()-} D_s^{(*)+}$*

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D72 (2005) 111101

Search for the radiative decay $B \rightarrow \phi \gamma$

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 72 (2005) 091103

Measurement of the branching ratios $\gamma(D_s^{-} \rightarrow D_s^+ \pi^0)/\gamma(D_s^{*-} \rightarrow D_s^+ \gamma)$ and $\gamma(D^{*0} \rightarrow D^0 \pi^0)/\gamma(D^{*0} \rightarrow D^0 \gamma)$*

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 72 (2005) 091101

Dalitz-plot analysis of the decays $B^\pm \rightarrow K^\pm \pi^{-/+} \pi^\pm$

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 72 (2005) 072003

Study of the $\tau \rightarrow 3h^- 2h^+$ V_τ decay

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 72 (2005) 072001



Measurement of the branching fraction and decay rate asymmetry of $\bar{B} \rightarrow D\pi^+\pi^-\pi^0 K$

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 72 (2005) 071102

Measurement of CP Observables for the decays $B^\pm \rightarrow DCPOK^{\pm}$*

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 72 (2005) 071103

Dalitz plot analysis of $D^0 \rightarrow K^-OKK$

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 72 (2005) 052008

Precision measurement of the λc^+ baryon mass

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 72 (2005) 052006

Measurements of the $B \rightarrow X_s \gamma$ branching fraction and photon spectrum from a sum of exclusive final states

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 72 (2005) 052004

Amplitude analysis of the decay $B^\pm \rightarrow \pi^\pm \pi^\pm \pi^{-/+}$

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 72 (2005) 052002

*Search for the rare decay $\bar{B}^0 \rightarrow D^{*0} \gamma$*

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 72 (2005) 051106

Measurement of the time-dependent CP-violating asymmetry in $B^0 \rightarrow K_s^0 \pi^0 \gamma$ decays

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 72 (2005) 051103

Study of $B \rightarrow \pi \ell V$ and $B \rightarrow \rho \ell V$ decays and determination of $|V_{ub}|$

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 72 (2005) 051102

Measurement of the $B^+ \rightarrow p \bar{p} K^+$ branching fraction and study of the decay dynamics

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 72 (2005) 051101

*Search for $b \rightarrow u$ transitions in $B \rightarrow D^0 \bar{K}$ and $B \rightarrow D^{*0} \bar{K}$*

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 72 (2005) 032004

Evidence for $B^ \rightarrow \bar{K}^0 K^*$ and $B^0 \rightarrow K^0 \bar{K}^0$, and measurement of the branching fraction and search for direct CP violation in $B^* \rightarrow K^0 \pi^+$*

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 95 (2005) 221801

Search for lepton-flavor and lepton-number violation in the decay $\tau^- \rightarrow \ell^\mp h^\pm h^\mp$

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 95 (2005) 191801

Measurements of branching fractions and dalitz distributions for $B^0 \rightarrow D^{()\pm} K^0 \pi^\mp$ decays*

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 95 (2005) 171802

Measurement of time-dependent CP asymmetries and the CP-odd fraction in the decay $B^0 \rightarrow D^{+} D^*$*

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 95 (2005) 151804

Improved measurements of CP-violating asymmetry amplitudes in $B^0 \rightarrow \pi^+ \pi^-$ decays production and decay of χ_c^0 at BABAR

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 95 (2005) 151803

Observation of a broad structure in the $\pi^+ \pi^- J/\psi$ mass spectrum around $4.26 \text{ GeV}/c^2$

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 95 (2005) 142001

Measurement of branching fractions and charge asymmetries in B^+ decays to $\eta \pi^+$, ηK^+ , $\eta \rho^+$, and $\eta' \pi^+$, and search for B^0 decays to ηK^0 and $\eta \omega$

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 95 (2005) 131803

Measurement of double charmonium production in $e^+ e^-$ annihilations at $\sqrt{s} = 10.6 \text{ GeV}$

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 72 (2005) 031101

Measurement of the Cabibbo-Kobayashi-Maskawa angle γ in $B^\mp \rightarrow D^{()\mp} K^\mp$ decays with a Dalitz analysis of $D \rightarrow K^0 S \pi^+ \pi^-$*

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 95 (2005) 121802

Search for strange-Pentaquark Production in $e^+ e^-$ Annihilation at $\sqrt{s} = 10.58 \text{ GeV}$

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 95 (2005) 042002

Measurement of the Branching Fraction of $Y(4S) \rightarrow B^0 \bar{B}^0$

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 95 (2005) 042001

Improved measurement of the CKM angle α using $B^0 (\bar{B}) \rightarrow \rho^+ \rho^-$ Decays

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 95 (2005) 041805

Search for lepton flavor Violation in the decay $\tau^\pm \rightarrow \mu^\pm \gamma$

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 95 (2005) 041802

Measurement of time-dependent CP asymmetries in $B^0 \rightarrow D(\star)^{\pm} D^{\mp}$ Decays

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 95 (2005) 131802

Search for the rare leptonic decay $B^- \rightarrow \tau^- \bar{\nu}_\tau$

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 95 (2005) 041804

Determination of $|V_{ub}|$ from measurements of the electron and neutrino momenta in inclusive semileptonic B decays

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 95 (2005) 111801

Search for the decay $\tau^- \rightarrow 4\pi^- 3\pi^+ (\pi^0) \bar{\nu}_\tau$

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 72 (2005) 012003

Search for the Rare Decays $B^+ \rightarrow D(\star)^+ K^0 S$

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 72 (2005) 011102

Measurement of time-dependent CP-violating asymmetries and constraints on $\sin(2\beta + \gamma)$ with partial reconstruction of $B \rightarrow D^{\mp} \pi^\pm$ decays*

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 71 (2005) 112003

Measurement of the branching fraction and the CP-violating asymmetry for the decay $B^0 \rightarrow K^0 \pi^0$

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 71 (2005) 111102

Evidence for the Decay $B^\pm \rightarrow K^{\mp} \pi^0$*

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 71 (2005) 111101

Branching fraction and CP asymmetries of $B^0 \rightarrow K_s^0 K_s^0 K_s^0$

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 95 (2005) 011801

Search for decays of $B^0 \rightarrow e^+ e^-$, $B^0 \rightarrow \mu^+ \mu^-$, $B^0 \rightarrow e^\pm \mu^\mp$

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 94 (2005) 221803

Search for $B \rightarrow J/\psi D$ decays

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 71 (2005) 091103

Measurement of the $B^0 \rightarrow D^{-} D^{*+}$ and $D^+ \rightarrow \phi \pi^+$ branching fractions*

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 71 (2005) 091104

Measurement of CP asymmetries in $B^0 \rightarrow \phi K^0$ and $B^0 \rightarrow K^+ \bar{K}^0_s$ Decays

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 71 (2005) 091102

Search for CP violation and a measurement of the relative branching fraction in $D^+ \rightarrow K \bar{K}^+ \mu^+$ decays

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 71 (2005) 091101

Measurements of branching fractions and time-dependent CP-violating asymmetries in $B \rightarrow \eta' K$ decays

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 94 (2005) 191802

Branching fractions and CP asymmetries in $B^0 \rightarrow \pi^0 \pi^0$, $B^+ \rightarrow \pi^+ \pi^0$, and $B^+ \rightarrow K^+ \pi^0$ decays and isospin analysis of the $B \rightarrow \pi \pi$ system

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 94 (2005) 181802

Study of the $\bar{B} \rightarrow J/\psi K \pi^+ \pi^-$ decay and measurement of the $\bar{B} \rightarrow X(3872) \bar{K}$ branching fraction

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 71 (2005) 071103

Search for factorization-suppressed $B \rightarrow \chi c K()$ decays*

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 94 (2005) 171801

Improved measurement of CP asymmetries in $B^0 \rightarrow (\bar{c} c) K^0()$ decays*

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 94 (2005) 161803

Measurement of branching fractions and charge asymmetries for exclusive B decays to charmonium

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 94 (2005) 141801

$e^+ e^- \rightarrow \pi^+ \pi^- \pi^+ \pi^-$, $K^+ K^- \pi^+ \pi^-$, and $K^+ \bar{K} K^+ \bar{K}$ cross sections at center-of-mass energies 0.5-4.5 GeV measured with initial-state radiation

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 71 (2005) 052001

Measurement of the $\bar{B}^0 \rightarrow D^{+} \ell^- \bar{\nu}_\ell$ decay rate and $|V_{cb}|$*

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 71 (2005) 051502

Limit on the $B^0 \rightarrow \rho^0 \rho^0$ branching fraction and implications for the CKM angle α

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 94 (2005) 131801

Measurements of B meson decays to ωK^ and $\omega \rho$*

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 71 (2005) 031103

A search for the decay $B^+ \rightarrow K^+ \nu \bar{\nu}$

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 94 (2005) 101801

Search for a charged partner of the $X(3872)$ in the B meson decay $B \rightarrow X^- K, X^- \rightarrow J/\psi \pi^- \pi^0$

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 71 (2005) 031501

*Measurement of the ratio $\mathcal{B}(B^- \rightarrow D^{*0} K^-)/\mathcal{B}(B^- \rightarrow D^{*0} \pi^-)$ and of the CP asymmetry of $B^- \rightarrow D^{*0}_{CP+} K^-$ decays*

Aubert B., Barate R., Boutigny D., Couderc F., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 71 (2005) 031102

Time-integrated and time-dependent angular analyses of $B \rightarrow J/\psi K\pi$: A measurement of $\cos 2\beta$ with no sign ambiguity from strong phases

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Karyotakis Y., Lees J.P., Poireau V., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 71 (2005) 032005

Measurements of the branching fraction and CP-violation asymmetries in $B^0 \rightarrow f_0(980) K^0_S$

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 94 (2005) 041802

Search for the radiative penguin decays $B^+ \rightarrow \rho^+ \gamma$, $B^0 \rightarrow \rho^0 \gamma$, and $B^0 \rightarrow \omega \gamma$

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 94 (2005) 011801

Branching fractions and CP asymmetries in $B^0 \rightarrow K^+ K^0_S$ and $B^+ \rightarrow K^+ K^0_S K^0_S$

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 93 (2004) 181805

Search for B -meson decays to two-body final states with $d^0(980)$ mesons

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 70 (2004) 111102

Study of the decay $B^0(\bar{B}^0) \rightarrow \rho^+ \rho^-$, and constraints on the CKM angle α

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 93 (2004) 231801

Measurement of branching fractions, and CP and isospin Asymmetries for $B \rightarrow K^ \gamma$*

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 70 (2004) 112006

*Measurement of time-dependent CP-violating asymmetries in $B^0 \rightarrow K^{*0} \gamma (K^{*0} \rightarrow K_S^0 \pi^0)$ Decays*

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 93 (2004) 201801

Searches for B^0 decays to combinations of two charmless isoscalar mesons

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 93 (2004) 181806

Study of the $e^+ e^- \rightarrow \pi^+ \pi^- \pi^0$ process using initial state radiation with BABAR

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 70 (2004) 072004

Measurement of the branching fractions for inclusive B^- and \bar{B}^0 decays to flavor-tagged D, D_s , and Δc

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 70 (2004) 091106

Measurement of neutral B decay branching fractions to $K_S^0 \pi^+ \pi^-$ final states

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 70 (2004) 091103

Measurements of the branching fractions of charged B Decays to $K^\pm \pi^\mp \pi^\pm$ final states

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 70 (2004) 092001

Measurement of the $B^0 \rightarrow K^ 2(1430) 0 \gamma$ and $B^+ \rightarrow K^* 2(1430)^+ \gamma$ branching fractions*

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 70 (2004) 091105

Search for the decay $B^0 \rightarrow J/\psi \gamma$

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 70 (2004) 091104

Search for flavor-changing neutral current and lepton-flavor violating decays of $D^0 \rightarrow l^+ l^-$

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 93 (2004) 191801

Search for $D^0 - \bar{D}^0$ mixing using semileptonic decay modes

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 70 (2004) 091102

*Measurement of the $B^0 \rightarrow \phi K^{*0}$ decay amplitudes*

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 93 (2004) 231804

Measurement of the Branching Fraction for $B^\pm \rightarrow \chi c^0 K^\pm$

Aubert B., Boutigny D., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Robbe P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 69 (2004) 071103

Study of $B \rightarrow D() + sJ \bar{D}(\ast)$ decays*

Aubert B., Boutigny D., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Robbe P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 93 (2004) 181801

Measurements of CP-violating asymmetries in $B^0 \rightarrow K^0_s \pi^0$ Decays

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 93 (2004) 131805

Search for $B^\pm \rightarrow [K^\pm \pi^\pm] DK^\pm$ and upper limit on the $b \rightarrow u$ amplitude in $B^\pm \rightarrow DK^\pm$

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 93 (2004) 131804

Direct CP violating asymmetry in $B^0 \rightarrow K^+ \pi^-$ decays

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 93 (2004) 131801

Measurement of branching fractions and charge asymmetries in $B^\pm \rightarrow \rho^\pm \pi^0$ and $B^\pm \rightarrow \rho^0 \pi^\pm$ decays, and search for $B^0 \rightarrow \rho^0 \pi^0$

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 93 (2004) 051802

Search for B^0 decays to invisible final states and to $\nu \bar{\nu} \gamma$

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 93 (2004) 091802

*Bound on the ratio of decay amplitudes for $B^0 \rightarrow J/\psi K^{*0}$ and $B^0 \rightarrow J/\psi K^{*0}$*

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 93 (2004) 081801

Measurement of the $B \rightarrow X_s l^+ l^-$ branching fraction with a sum over exclusive modes

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 93 (2004) 081802

Measurement of the time-dependent CP asymmetry in the $B^0 \rightarrow \phi K^0$ decay

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 93 (2004) 071801

Observation of the decay $B \rightarrow J/\psi \eta K$ and search for $X(3872) \rightarrow J/\psi \eta$

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 93 (2004) 041801

Measurement of the direct CP asymmetry in $b \rightarrow s\gamma$ decays

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 93 (2004) 021804

Limits on the decay-rate difference of neutral- B mesons and on CP, T , and CPT violation in $B^0 \bar{B}^0$ oscillations

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 70 (2004) 012007

Branching fraction measurements of $B \rightarrow \eta cK$ decays

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 70 (2004) 011101

B meson decays to $\eta^{(\prime)} K^, \eta^{(\prime)} \rho, \eta^{(\prime)} \pi^0, \omega \pi^0$, and $\phi \pi^0$*

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 70 (2004) 032006

Measurement of the electron energy spectrum and its moments in inclusive $B \rightarrow X e \nu$ decays

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 69 (2004) 111104

Measurements of moments of the hadronic mass distribution in semileptonic B decays

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 69 (2004) 111103

Search for the decay $B^0 \rightarrow p \bar{p}$

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 69 (2004) 091503

Study of high momentum η' production in $B \rightarrow \eta' X_S$

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 93 (2004) 061801

Measurements of branching fractions and CP-violating asymmetries in B meson decays to charmless two-body states containing a K^0

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 92 (2004) 201802

Measurement of time-dependent CP asymmetries in $B^0 \rightarrow D^{()\pm} \pi^\mp$ decays and constraints on $\sin(2\beta + \gamma)$*

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 92 (2004) 251801

Measurement of time-dependent CP asymmetries and constraints on $\sin(2\beta + \gamma)$ with partial reconstruction of $B^0 \rightarrow D^{\mp} \pi^\pm$ decays*

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration

Physical Review Letters 92 (2004) 251802

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 violation

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration

Physical Review Letters 92 (2004) 241802

Determination of the branching fraction for $B \rightarrow X c \bar{c} l \bar{\nu}$ decays and of $|V_{cb}|$ from hadronic-mass and lepton-energy moments

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration

Physical Review Letters 93 (2004) 011803

Search for the rare leptonic decay $B^+ \rightarrow \mu^+ \nu_\mu$

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration

Physical Review Letters 92 (2004) 221803

Limits on the decay-rate difference of neutral B mesons and on CP, T, and CPT violation in $B^0 \bar{B}^0$ oscillations

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration

Physical Review Letters 92 (2004) 181801

Measurement of the average ϕ multiplicity in B meson decay

Aubert B., Barate R., Boutigny D., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Robbe P., Tisserand V., Zghiche A. et al, BABAR Collaboration

Physical Review D 69 (2004) 052005

Measurement of the branching fractions and CP asymmetry of $B^- \rightarrow D^0 (CP) \bar{K}$ decays with the BaBar detector

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration

Physical Review Letters 92 (2004) 202002

Search for the radiative decays $B \rightarrow \rho \gamma$ and $B^0 \rightarrow \omega \gamma$

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration

Physical Review Letters 92 (2004) 111801

Measurement of the inclusive charmless semileptonic branching ratio of B mesons and determination of $|V_{ub}|$

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration

Review Letters 92 (2004) 071802

*Measurement of the branching fraction and polarization for the decay $B^- \rightarrow D^{*0} K^-$*

Aubert B., Barate R., Boutigny D., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Robbe P., Tisserand V., Zghiche A. et al, BABAR Collaboration

Physical Review Letters 92 (2004) 141801

Measurements of the mass and width of the η_c meson and of an $\eta_c(2S)$ candidate

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration

Physical Review Letters 92 (2004) 142002

Measurement of $\sin 2\beta$ with hadronic and previously unused muonic J/ψ decays

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 69 (2004) 052001

Measurements of branching fractions in $B \rightarrow \phi K$ and $B \rightarrow \phi \pi$ and search for direct CP violation in $B^+ \rightarrow \phi K^+$

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 69 (2004) 011102

J/ψ production via initial state radiation in $e^+ e^- \rightarrow \mu^+ \mu^- \gamma$ at an $e^+ e^-$ center-of-mass energy near 10.6 GeV

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 69 (2004) 011103

Measurement of branching fractions of color-suppressed decays of the \bar{B}^0 meson to $D^{()0}\pi^0$, $D^{(*)0}\eta$, $D^{(*)0}\omega$ and $D^0\eta'$*

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 69 (2004) 032004

Observation of a narrow meson decaying to $D s^+ \pi^0 \gamma$ at a mass of 2.458 GeV/c^2

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 69 (2004) 031101

Observation of $B^0 \rightarrow \omega K^0$, $B^+ \rightarrow \eta \pi^+$, and $B^+ \rightarrow \eta K^+$ and study of related decays

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 92 (2004) 061801

Observation of the decay $B^0 \rightarrow \rho^+ \rho^-$ and measurement of the branching fraction and polarization

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 69 (2004) 031102

Search for lepton-flavor violation in the decay $\tau^- \rightarrow \ell^- \ell^+ \ell^-$

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review Letters 92 (2004) 121801

Measurement of the branching fraction for $B^- \rightarrow D^0 K^-$

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 69 (2004) 051101

Measurement of the B^+/B^0 production ratio from the $Y(4S)$ meson using $B^+ \rightarrow J/\psi K^+$ and $B^0 \rightarrow J/\psi K_s^0$ decays

Aubert B., Barate R., Boutigny D., Couderc F., Gaillard J.M., Hicheur A., Karyotakis Y., Lees J.P., Tisserand V., Zghiche A. et al, BABAR Collaboration
Physical Review D 69 (2004) 071101

CMS

Cross-calibration of two automatic quality control systems for the CMS ECAL crystals

Auffray E., Schneegans M. et al, CMS Collaboration
Nuclear Instruments and Methods in Physics Research A 523 (2004) 355-364

Electronic calibration developed for the CMS electromagnetic calorimeter

Baek Y.W., Boget D., David P.Y., Ditta J., Hermel V., Fouque N., Mendiburu J.P., Nédélec P., Peigneur J.P., Poireau V., Rebecchi P., Sillou D., CMS Collaboration
Nuclear Instruments and Methods in Physics Research A 519 (2004) 545-557

Results of the first performance tests of the CMS electromagnetic calorimeter

Adzic, P., Guillaud J.P., Nédélec P., Sillou D. et al, CMS Collaboration
EPJ C Direct (2005).

L3

Measurement of the running of the electromagnetic coupling at large momentum-transfer at LEP

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Physics Letters B 623 (2005) 26-36

Measurement of the photon structure function $F^{\gamma} 2$ with the L3 detector at LEP

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Physics Letters B 622 (2005) 249-264

Measurement of the cross sections for open-beauty production in photon-photon collisions at LEP

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Physics Letters B 619 (2005) 71-81

Compton scattering of quasi-real virtual photons at LEP

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Physics Letters B 616 (2005) 145-158

Neutral-current four-fermion production in $e^+ e^-$ interactions at LEP

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Physics Letters B 616 (2005) 159-173

Measurement of exclusive $\rho^+ \rho^-$ production in mid-virtuality two-photon interactions and study of the $\gamma\gamma^ \rightarrow \rho\rho$ process at LEP*

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Physics Letters B 615 (2005) 19-30

Z-boson production with two unobserved, back-to-back, hard photons at LEP

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Physics Letters B 613 (2005) 118-127

Measurement of the shadowing of high-energy cosmic rays by the moon : a search for TeV-energy antiprotons

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Astroparticle Physics 23 (2005) 411-434

Study of spin and decay-plane correlations of W bosons in the $e^+ e^- \rightarrow W^+ W^-$ process at LEP

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
European Physical Journal C 40 (2005) 333-341

Search for an invisibly-decaying Higgs boson at LEP

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Physics Letters B 609 (2005) 35-48

Measurement of exclusive $\rho^0 \rho^0$ production in mid-virtuality two-photon interactions at LEP

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Physics Letters B 604 (2004) 48-60

Inclusive jet production in two-photon collisions at LEP

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
L3 Physics Letters B 602 (2004) 157-66

Studies of hadronic event structure in $e^+ e^-$ annihilation from 30 GeV to 209 GeV with the L3 detector

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Physics Reports 399 (2004) 71-174

Measurement of the cross section of W-boson pair production at LEP

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Physics Letters B 600 (2004) 24-40

Measurement of the atmospheric muon spectrum from 20 to 300 GeV

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Physics Letters B 598 (2004) 15-32

Study of the $e^+ e^- \rightarrow Z\gamma$ process at LEP and limits on triple neutral-gauge-boson couplings

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Physics Letters B 597 (2004) 119-130

Measurement of exclusive $\rho^+ \rho^-$ production in high- Q^2 two-photon collisions at LEP

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Physics Letters B 597 (2004) 26-38

Search for branons at LEP

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Physics Letters B 597 (2004) 145-154

Search for anomalous couplings in the Higgs sector at LEP

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Physics Letters B 589 (2004) 89-102

Single- and multi-photon events with missing energy in $e^+ e^-$ collisions at LEP

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Physics Letters B 587 (2004) 16-32

Inclusive Lambda production in two-photon collisions at LEP

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Physics Letters B 586 (2004) 140-150

Measurement of triple-gauge-boson couplings of the W boson at LEP

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Physics Letters B 586 (2004) 151-166

Search for colour singlet and colour reconnection effects in hadronic Z decays at LEP

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Physics Letters B 581 (2004) 19-30

Measurement of the Z-boson mass using $e^+e^- \rightarrow Z\gamma$ event at centre-of-mass energies above the Z pole

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Physics Letters B 585 (2004) 42-52

Flavour independent search for neutral Higgs bosons at LEP

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Physics Letters B 583 (2004) 14-27

Muon-pair and τ -pair production in two-photon collisions at LEP

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Letters B 585 (2004) 53-62

Search for scalar leptons and scalar quarks at LEP

Achard P., Blaising J.J., Brochu F., Coignet G., Degre A., Duchesneau D., Perret-Gallix D., Rosier-Lees S., Vivargent M. et al., L3 Collaboration
Physics Letters B 580 (2004) 37-49

NA38 -NA50

The production of ρ w and φ vector-mesons by protons and sulphur ions with incident momentum of 200 GeV/c per nucleon

M.C. Abreu, C. Baglin, A. Bussière et al., NA38 Collaboration
European Physical Journal C 44 (2005) 375-382.

Fission cross sections of lead projectiles in Pb-nucleus interactions at 40 and 158 GeV/c per nucleon

Alessandro B., Baglin C., Bussière A. et al, NA50 Collaboration
Physical Review C 69 (2004) 034904

Charmonium production and nuclear absorption in p-A interactions at 450 GeV

Alessandro B., Baglin C., Bussière A. et al, NA50 Collaboration
European Physical Journal C 33 (2004) 31-40



NOMAD

Bose-Einstein correlations in charged current muon-neutrino interactions in the NOMAD experiment at CERN
Astier P., Bassompierre G., Gaillard J.M., Gouanère M., Krasnoperov A., Mendiburu J.P., Nédélec P.,
Pessard H., Sillou D. et al, NOMAD Collaboration
Nuclear Physics B 686 (2004) 3-28

A study of strange particles produced in neutrino neutral current interactions in the NOMAD Experiment

Naumov D., Bassompierre G., Gaillard J.M., Gouanère M., Krasnoperov A., Mendiburu J.P., Nédélec P.,
Pessard H., Sillou D. et al, NOMAD Collaboration
Nuclear Physics B 700 (2004) 51-68

OPERA

High-speed particle tracking in nuclear emulsion by last-generation automatic microscopes
Armenise N., Damet J. et al, OPERA Collaboration
Nuclear Instruments and Methods in Physics Research A 551 (2005) 261-270

VIRGO

Measurement of the seismic attenuation performance of the VIRGO Superattenuator
Braccini S., Beauville F., Buskulic D., Gouaty R., Grosjean D., Marion F., Masserot A., Mours B.,
Tournefier E., Tombolato D., Verkindt D., Yvert M. et al, VIRGO Collaboration
Astroparticle Physics 23 (2005) 557-565

Lock acquisition of the central interferometer of the Virgo gravitational wave detector
Acernese F., Beauville F., Buskulic D., Marion F., Masserot A., Massonnet L., Mours B., Ramonet J.,
Tournefier E., Verkindt D., Veziant O., Yvert M. et al, VIRGO Collaboration
Astroparticle Physics 21 (2004) 465-477

The commissioning of the central interferometer of the Virgo gravitational wave detector
Acernese F., Beauville F., Buskulic D., Marion F., Masserot A., Massonnet L., Mours B., Ramonet J.,
Tournefier E., Verkindt D., Veziant O., Yvert M. et al, VIRGO Collaboration
Astroparticle Physics 21 (2004) 1-22

A local control system for the test masses of the Virgo gravitational wave detector
Acernese F., Beauville F., Buskulic D., Marion F., Masserot A., Massonnet L., Mours B., Ramonet J.,
Tournefier E., Verkindt D., Veziant O., Yvert M. et al, VIRGO Collaboration
Astroparticle Physics 20 (2004) 617-628

First locking of the VIRGO central area interferometer with suspension hierarchical control
Acernese F., Beauville F., Buskulic D., Marion F., Masserot A., Massonnet L., Mours B., Ramonet J.,
Tournefier E., Verkindt D., Veziant O., Yvert M. et al, VIRGO Collaboration
Astroparticle Physics 20 (2004) 629-640

Search for inspiralling binary events in the Virgo engineering run data
Acernese F., Beauville F., Buskulic D., Marion F., Masserot A., Massonnet L., Mours B., Ramonet J.,
Tournefier E., Verkindt D., Veziant O., Yvert M. et al, VIRGO Collaboration
Classical and Quantum Gravity 21 (2004) S709-S716

HORS COLLABORATION

Low energy hadronic contribution to the QED vacuum polarization

Burkhardt H, Pietrzyk B.

Physical Review D 72 (2005) 057501

CP Violation and the CKM Matrix: Assessing the Impact of the Asymmetric B Factories

Charles J., Laplace S. et al,

European Physical Journal C 41 (2005) 1-131

Comparison of Geant4 electromagnetic physics models against the NIST reference data

Amako K., Maire M. et al,

IEEE Transactions on Nuclear Science 52 (2005) 910-918

Azimuthal angular distributions in EDDE as spin-parity analyser and glueball filter for LHC

Petrov V. A., Ryutin R. A., Sobol A.E., Guillaud J.P.

Journal of High Energy Physics 06 (2005) 007

POLAR, a compact detector for Gamma Ray Bursts photon polarization measurements

Produit N., Vialle J.P. et al,

Nuclear Instruments and Methods in Physics Research A 550 (2005) 616-625

A new experiment to search for the invisible decay of the orthopositronium

Badertscher A., Peigneux J.P., Sillou D. et al,

International Journal of Modern Physics A 19 (2004) 3819-3833

An apparatus to search for mirror dark matter via the invisible decay of orthopositronium in vacuum

Badertscher A., Peigneux J.P., Sillou D. et al,

International Journal of Modern Physics A 19 (2004) 3833-3841

Status of orthopositronium decay rate measurements

Sillou D.

International Journal of Modern Physics A 19 (2004) 3919-3925

