

PHYSICAL REVIEW D

For editorial and subscription correspondence,
please see inside front cover
(ISSN: 1550-7998)

PERIODICALS
Postmaster send address changes to:
PHYSICAL REVIEW D
APS Subscription Services
Suite 1N01
2 Huntington Quadrangle
Melville, NY 11747-4502

THIRD SERIES, VOLUME 77, NUMBER 5

CONTENTS

D1 MARCH 2008

RAPID COMMUNICATIONS

Search for $\bar{B}^0 \rightarrow \Lambda_c^+ \bar{\Lambda}_c^-$ decay at Belle (6 pages)	051101(R)
Y. Uchida <i>et al.</i> (Belle Collaboration)	
Limits on the production of narrow $t\bar{t}$ resonances in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV (7 pages)	051102(R)
T. Aaltonen <i>et al.</i> (CDF Collaboration)	
Measurement of the $B \rightarrow X_s \gamma$ branching fraction and photon energy spectrum using the recoil method (8 pages)	051103(R)
B. Aubert <i>et al.</i> (BABAR Collaboration)	
Critical line from imaginary to real baryonic chemical potentials in two-color QCD (5 pages)	051501(R)
Paolo Cea, Leonardo Cosmai, Massimo D'Elia, and Alessandro Papa	
Single spin asymmetries in inclusive hadron production from semiinclusive DIS to hadronic collisions: Universality and phenomenology (5 pages)	051502(R)
M. Boglione, U. D'Alesio, and F. Murgia	
Constraints from D - $\bar{D}$ mixing in supersymmetric left-right symmetric models (5 pages)	051701(R)
Bhaskar Dutta and Yukihiko Mimura	
Polyakov loop extended Nambu–Jona-Lasinio model with imaginary chemical potential (5 pages)	051901(R)
Yuji Sakai, Kouji Kashiwa, Hiroaki Kouno, and Masanobu Yahiro	

ARTICLES

Search for matter-dependent atmospheric neutrino oscillations in Super-Kamiokande (6 pages)	052001
K. Abe <i>et al.</i> (Super-Kamiokande Collaboration)	
Search for chargino-neutralino production in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV with high- p_T leptons (20 pages)	052002
T. Aaltonen <i>et al.</i> (CDF Collaboration)	
Measurement of the $K^+ \rightarrow \pi^+ \nu \bar{\nu}$ branching ratio (40 pages)	052003
S. Adler <i>et al.</i>	
Observation of exclusive dijet production at the Fermilab Tevatron $p\bar{p}$ collider (28 pages)	052004
T. Aaltonen <i>et al.</i> (CDF Collaboration)	
Form factors in the quark resonance model (12 pages)	053001
Krzysztof M. Graczyk and Jan T. Sobczyk	
Precise formulation of neutrino oscillation in the Earth (11 pages)	053002
Wei Liao	
Lepton mass effects in weak charged current single pion production (7 pages)	053003
Krzysztof M. Graczyk and Jan T. Sobczyk	
Electroweak corrections to high energy processes using effective field theory (24 pages)	053004
Jui-yu Chiu, Frank Golf, Randall Kelley, and Aneesh V. Manohar	
Naturalness and the neutrino matrix (15 pages)	053005
J. Sayre and S. Wiesenfeldt	



Copyright 2008 by The American Physical Society

(Continued)



1550-7998(20080301)77:5;1-4

CONTENTS - Continued

PHYSICAL REVIEW D

THIRD SERIES, VOLUME 77, NUMBER 5

D1 MARCH 2008

Fermion masses from $SO(10)$ Hermitian matrices (10 pages)	053006
R. G. Moorhouse	
Ultrahigh energy neutrino scattering (5 pages)	053007
Edmond L. Berger, Martin M. Block, Douglas W. McKay, and Chung-I Tan	
Collinear and soft-gluon corrections to Higgs production at next-to-next-to-next-to-leading order (19 pages)	053008
Nikolaos Kidonakis	
ν induced threshold production of two pions and $N^*(1440)$ electroweak form factors (13 pages)	053009
E. Hernández, J. Nieves, S. K. Singh, M. Valverde, and M. J. Vacas	
Gluon-induced weak boson fusion (6 pages)	053010
Robert V. Harlander, Jens Vollinga, and Marcus M. Weber	
Four-zero neutrino Yukawa textures in the minimal seesaw framework (10 pages)	053011
Gustavo C. Branco, David Emmanuel-Costa, M. N. Rebelo, and Probir Roy	
Revised value of the eighth-order QED contribution to the anomalous magnetic moment of the electron (24 pages)	053012
T. Aoyama, M. Hayakawa, T. Kinoshita, and M. Nio	
Minimal seesaw as an ultraviolet insensitive cure for the problems of anomaly mediation (7 pages)	053013
R. N. Mohapatra, N. Setzer, and S. Spinner	
Quantum-gravity decoherence effects in neutrino oscillations: Expected constraints from CNGS and J-PARC (19 pages)	053014
Nick E. Mavromatos, Anselmo Mereaglia, André Rubbia, Alexander S. Sakharov, and Sarben Sarkar	
Partners of $Z(4430)$ and productions in B decays (7 pages)	054001
Ying Li, Cai-Dian Lü, and Wei Wang	
Influence of heavy-quark recombination on the nucleon strangeness asymmetry (5 pages)	054002
Puze Gao and Bo-Qiang Ma	
Weak productions of new charmonium in semileptonic decays of B_c (15 pages)	054003
Yu-Ming Wang and Cai-Dian Lü	
Perturbative fragmentation (9 pages)	054004
B. Z. Kopeliovich, H.-J. Pirner, I. K. Potashnikova, Ivan Schmidt, and A. V. Tarasov	
Spin asymmetries for elastic proton scattering and the spin-dependent couplings of the Pomeron (14 pages)	054005
T. L. Trueman	
Power corrections in charmless nonleptonic B decays: Annihilation is factorizable and real (20 pages)	054006
Christian M. Arnesen, Zoltan Ligeti, Ira Z. Rothstein, and Iain W. Stewart	
Quark condensates in the chiral bag with the Nambu–Jona-Lasinio interaction (10 pages)	054007
S. Yasui, A. Hosaka, and M. Oka	
Decay $\phi \rightarrow f_0(980)\gamma$ and the process $e^+e^- \rightarrow \phi f_0(980)$ (7 pages)	054008
Yu. M. Bystritskiy, M. K. Volkov, E. A. Kuraev, E. Bartoš, and M. Sečanský	
Hexagonal structure of baby Skymion lattices (8 pages)	054009
Itay Hen and Marek Karliner	
Resolving the sign ambiguity in $\Delta\Gamma_s$ with $B_s \rightarrow D_s K$ (4 pages)	054010
Soumitra Nandi and Ulrich Nierste	
Extracting Boer-Mulders functions from $p + D$ Drell-Yan processes (6 pages)	054011
Bing Zhang, Zhun Lu, Bo-Qiang Ma, and Ivan Schmidt	
Tau and muon pair production cross sections in electron-positron annihilations at $\sqrt{s} = 10.58$ GeV (7 pages)	054012
Swagato Banerjee, Bolek Pietrzyk, J. Michael Roney, and Zbigniew Was	
Nuclear parton distribution functions from neutrino deep inelastic scattering (14 pages)	054013
I. Schienbein, J. Y. Yu, C. Keppel, J. G. Morfin, F. Olness, and J. F. Owens	
Geometric scaling at BNL RHIC and CERN LHC (8 pages)	054014
Daniël Boer, Andre Utermann, and Erik Wessels	
Pion-pion scattering amplitude. III. Improving the analysis with forward dispersion relations and Roy equations (26 pages)	054015
R. Kamiński, J. R. Peláez, and F. J. Ynduráin	
Inclusive production of J/ψ meson in proton-proton collisions at BNL RHIC (14 pages)	054016
S. P. Baranov and A. Szczurek	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW D

THIRD SERIES, VOLUME 77, NUMBER 5

D1 MARCH 2008

Quantization of the $B = 1$ and $B = 2$ Skyrmions (7 pages)	054017
Jimmy Fortier and Luc Marleau	
Jet-induced gauge field instabilities in the quark-gluon plasma: A kinetic theory approach (11 pages)	054018
Massimo Mannarelli and Cristina Manuel	
Target mass corrections for the virtual photon structure functions to the next-to-next-to-leading order in QCD (12 pages)	054019
Yoshio Kitadono, Ken Sasaki, Takahiro Ueda, and Tsuneo Uematsu	
Pentaquark in the flux tube model (6 pages)	054020
M. Iwasaki and F. Takagi	
Inelastic final-state interaction (13 pages)	054021
Mahiko Suzuki	
Study of $K^0 \rightarrow \pi^- e^+ \nu_e e^+ e^-$ in chiral perturbation theory (10 pages)	054022
K. Tsuji and T. Sato	
Three flavor Nambu–Jona-Lasinio model with Polyakov loop and competition with nuclear matter (9 pages)	054023
M. Ciminale, R. Gatto, N.D. Ippolito, G. Nardulli, and M. Ruggieri	
Structure of the $(0^+, 1^+)$ mesons B_{s0} and B_{s1} , and the strong coupling constant $g_{B_{s0}BK}$ and $g_{B_{s1}B^*K}$ (8 pages)	054024
Z. G. Wang	
Spectra and decays of hybrid charmonia (9 pages)	054025
Yu.S. Kalashnikova and A.V. Nefediev	
Wave function of $[70, 1^-]$ baryons in the $1/N_c$ expansion (10 pages)	054026
N. Matagne and Fl. Stancu	
Chirally symmetric but confining dense, cold matter (7 pages)	054027
L. Ya. Glozman and R.F. Wagenbrunn	
QCD corrections to J/ψ plus η_c production in e^+e^- annihilation at $\sqrt{s} = 10.6$ GeV (8 pages)	054028
Bin Gong and Jian-Xiong Wang	
Probing the ground state in gauge theories (12 pages)	054501
T. Heinzl, A. Ilderton, K. Langfeld, M. Lavelle, W. Lutz, and D. McMullan	
Absence of vortex condensation in a two dimensional fermionic XY model (5 pages)	054502
D.J. Cecile and Shailesh Chandrasekharan	
Dynamical eightfold way mesons in strongly coupled lattice QCD (11 pages)	054503
Antônio Francisco Neto, Michael O’Carroll, and Paulo A. Faria da Veiga	
Staggered heavy baryon chiral perturbation theory (26 pages)	054504
Jon A. Bailey	
Bounds on the simplest little Higgs model mass spectrum through Z leptonic decay (7 pages)	055001
Alex G. Dias, C.A. de S. Pires, and P.S. Rodrigues da Silva	
Fermion masses, leptogenesis, and supersymmetric SO(10) unification (12 pages)	055002
J.C. Romão, M.A. Tórtola, M. Hirsch, and J.W. Valle	
Electroweak chiral Lagrangian from one-doublet and topcolor-assisted technicolor models (30 pages)	055003
Hong-Hao Zhang, Shao-Zhou Jiang, Jun-Yi Lang, and Qing Wang	
Charged Higgs-boson production in association with an electron and a neutrino at electron-positron colliders (12 pages)	055004
Oliver Brein and Terrance Figy	
Hypercharge-universal topcolor (15 pages)	055005
Felix Braam, Michael Flossdorf, R. Sekhar Chivukula, Stefano Di Chiara, and Elizabeth H. Simmons	
Supersymmetry without a light Higgs boson at the CERN LHC (16 pages)	055006
Leone Cavicchia, Roberto Franceschini, and Vyacheslav S. Rychkov	
Threshold and flavor effects in the renormalization group equations of the MSSM: Dimensionless couplings (31 pages)	055007
Andrew D. Box and Xerxes Tata	
Embedding the Zee-Wolfenstein neutrino mass matrix in an $SO(10) \times A_4$ GUT scenario (9 pages)	055008
Walter Grimus and Helmut Kühböck	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW D

THIRD SERIES, VOLUME 77, NUMBER 5

D1 MARCH 2008

Physical parameters and basis transformations in the two-Higgs-doublet model (11 pages)	055009
C.C. Nishi	
Gauge-Higgs unification at CERN LHC (8 pages)	055010
Nobuhito Maru and Nobuchika Okada	
Leptoquarks: Neutrino masses and related accelerator signals (13 pages)	055011
D. Aristizabal Sierra, M. Hirsch, and S.G. Kovalenko	
Decays of the lightest Higgs Z_H and the onset of strong dynamics (6 pages)	055012
John Boersma and Andrew Whitbeck	
Unparticle physics in diphoton production at the CERN LHC (8 pages)	055013
M.C. Kumar, Prakash Mathews, V. Ravindran, and Anurag Tripathi	
Complementarity of gamma-ray and CERN LHC searches for neutralino dark matter in the focus point region (11 pages)	055014
E. Moulin, A. Jacholkowska, G. Moulhaka, J.-L. Kneur, E. Nuss, T. Lari, G. Polesello, D. Tovey, M. White, and Z. Yang	
Symmetry breaking patterns for little Higgs models from strong dynamics (5 pages)	055015
Puneet Batra and Z. Chacko	
Quark and lepton masses and mixing in $SO(10)$ with a GUT-scale vector matter (14 pages)	055016
Michal Malinský	
Early supersymmetry discovery at the CERN LHC without missing E_T : The role of multileptons (6 pages)	055017
Howard Baer, Harrison Prosper, and Heaya Summy	
Pseudo-Goldstone Higgs production via gluon fusion (10 pages)	055018
Adam Falkowski	
FCNC B_s and Λ_b transitions: Standard model versus a single universal extra dimension scenario (9 pages)	055019
P. Colangelo, F. De Fazio, R. Ferrandes, and T.N. Pham	
Dynamical breaking of chiral symmetry: A new mechanism (8 pages)	055020
Emidio Gabrielli	
Evidence for a $J/\psi p \bar{p}$ Pauli strong coupling? (7 pages)	056001
T. Barnes, X. Li, and W. Roberts	
Dirac neutrinos and anomaly-free discrete gauge symmetries (18 pages)	056002
Christoph Luhn and Marc Thormeier	
Remnant break-up and muon production in cosmic ray air showers (6 pages)	056003
Hans-Joachim Drescher	
Near-integrability and confinement for high-energy hadron-hadron collisions (9 pages)	056004
Peter Orland	
Gluelump spectrum from Coulomb gauge QCD (8 pages)	056005
Peng Guo, Adam P. Szczepaniak, Giuseppe Galatà, Andrea Vassallo, and Elena Santopinto	
Inverse amplitude method and Adler zeros (13 pages)	056006
A. Gómez Nicola, J.R. Peláez, and G. Ríos	
Light-front dynamics and AdS/QCD correspondence: The pion form factor in the space- and time-like regions (20 pages)	056007
Stanley J. Brodsky and Guy F. de Téramond	
Mass gap in the 2D $O(3)$ nonlinear sigma model with a $\theta = \pi$ term (5 pages)	056008
B. Allés and A. Papa	
Massive neutrino in noncommutative space-time (8 pages)	056009
M.M. Ettefaghi and M. Haghighat	
Structure of the $\Lambda(1405)$ baryon resonance from its large N_c behavior (5 pages)	056010
Tetsuo Hyodo, Daisuke Jido, and Luis Roca	

BRIEF REPORTS

Constructing the leptonic unitarity triangle (4 pages)	057301
Gulsheen Ahuja and Manmohan Gupta	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW D

THIRD SERIES, VOLUME 77, NUMBER 5

D1 MARCH 2008

Neutrino masses and lepton flavor violation in the 3-3-1 model with right-handed neutrinos (<i>4 pages</i>)	057302
P. V. Dong and H. N. Long	
Top-quark FCNC decay $t \rightarrow cgg$ in topcolor-assisted technicolor model (<i>4 pages</i>)	057501
Huan-Jun Zhang	
Energy of n identical bosons in a finite volume at $\mathcal{O}(L^{-7})$ (<i>3 pages</i>)	057502
William Detmold and Martin J. Savage	
Gauge theories with overlap fermions in an arbitrary representation: Evaluation of the 3-loop β -function (<i>4 pages</i>)	057503
M. Constantinou and H. Panagopoulos	
Constraint on $\bar{\rho}, \bar{\eta}$ from $B \rightarrow K^* \pi$ (<i>4 pages</i>)	057504
Michael Gronau, Dan Pirjol, Amarjit Soni, and Jure Zupan	

ERRATA

Erratum: Lepton mass effects in single pion production by neutrinos [Phys. Rev. D 76 , 113004 (2007)] (<i>1 page</i>)	059901(E)
Ch. Berger and L. M. Sehgal	