PHYSICAL REVIEW C

For editorial and subscription correspondence, please see inside front cover
(ISSN: 0556-2813)

PERIODICALS
Postmaster send address changes to:
American Institute of Physics
Suite 1NO1
2 Huntington Quadrangle
Melville, NY 11747-4502

THIRD SERIES, VOLUME 70, NUMBER 5 *CONTENTS* **NOVEMBER 2004**

RAPID COMMUNICATIONS

Shape transition and oblate-prolate coexistence in $N=Z$ *fpg*-shell nuclei *(5 pages)* . . . . . 051301(R)
K. Kaneko, M. Hasegawa, and T. Mizusaki

Structure of ^{15,16}C and phenomenology of the hindered $E2$ transition in ^{16}C *(5 pages)* . . . . . 051302(R)
Y. Suzuki, H. Matsumura, and B. Abu-Ibrahim

Parametrization of SU(3) spectroscopic factors for light nuclei within an algebraic model *(4 pages)* . . . . . 051303(R)
P. O. Hess, A. Algora, J. Cseh, and J. P. Draayer

$\Lambda N \rightarrow NN$ weak interaction in effective-field theory *(5 pages)* . . . . . 051601(R)
Assumpta Parreño, Cornelius Bennhold, and Barry R. Holstein

Temperature and fissility dependence of fragment mass variance in heavy ion induced fission *(5 pages)* . . . . . 051602(R)
Y. S. Sawant, A. Saxena, R. K. Choudhury, P. K. Sahu, R. G. Thomas, L. M. Pant, B. K. Nayak, and D. C. Biswas

Particle production at very low transverse momenta in Au+Au collisions at $\sqrt{s_{NN}}=200$ GeV *(4 pages)* . . . . . 051901(R)
B. B. Back, M. D. Baker, M. Ballintijn, D. S. Barton, R. R. Betts, A. A. Bickley, R. Bindel, A. Budzanowski, W. Busza, A. Carroll, M. P. Decowski, E. García, N. George, K. Gulbrandsen, S. Gushue, C. Halliwell, J. Hamblen, G. A. Heintzelman, C. Henderson, D. J. Hofman, R. S. Hollis, R. Hołyński, B. Holzman, A. Iordanova, E. Johnson, J. L. Kane, J. Katzy, N. Khan, W. Kucewicz, P. Kulinich, C. M. Kuo, W. T. Lin, S. Manly, D. McLeod, A. C. Mignerey, R. Nouicer, A. Olszewski, R. Pak, I. C. Park, H. Pernegger, C. Reed, L. P. Remsberg, M. Reuter, C. Roland, G. Roland, L. Rosenberg, J. Sagerer, P. Sarin, P. Sawicki, W. Skulski, S. G. Steadman, P. Steinberg, G. S. F. Stephans, A. Sukhanov, J.-L. Tang, A. Trzupek, C. Vale, G. J. van Nieuwenhuizen, R. Verdier, F. L. H. Wolfs, B. Wosiek, K. Woźniak, A. H. Wuosmaa, and B. Wysłouch
(PHOBOS Collaboration)

Neutrinoless double electron capture: A tool to search for Majorana neutrinos *(5 pages)* . . . . . 052501(R)
Z. Sujkowski and S. Wycech

ARTICLES

Nucleon-Nucleon Interaction, Few-Body Systems

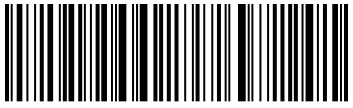
Spin-asymmetry energy of nuclear matter *(7 pages)* 054001
N. Kaiser

Effectiveness of effective field theory in peripheral nucleon-nucleon scattering *(6 pages)* 054002
Michael C. Birse and Judith A. McGovern



Copyright 2004 by The American Physical Society

(Continued)



PHYSICAL REVIEW C THIRD SERIES, VOLUME 70, NUMBER 5 NOVEMBER 2004

Vector analyzing power in elastic electron-proton scattering *(13 pages)* 054003
L. Diaconescu and M. J. Ramsey-Musolf

Nuclear Structure

β decay of odd-A As to Ge isotopes in the interacting boson-fermion model *(10 pages)* 054301
S. Brant, N. Yoshida, and L. Zuffi

Nuclear matrix elements for the ^{48}Ca two-neutrino double-β decay from high-resolution charge-exchange reactions *(5 pages)* 054302
S. Rakers, C. Bäumer, A. M. van den Berg, B. Davids, D. Frekers, D. De Frenne, Y. Fujita, E.-W. Grewe, P. Haefner, M. N. Harakeh, M. Hunyadi, E. Jacobs, H. Johansson, B. C. Junk, A. Korff, A. Negret, L. Popescu, H. Simon, and H. J. Wörtche

Q-phonon description of the low lying 1^- two-phonon states in spherical nuclei *(9 pages)* 054303
R. V. Jolos, N. Yu. Shirikova, and V. V. Voronov

Microscopic study of ^{240}Pu: Mean field and beyond *(7 pages)* 054304
M. Bender, P.-H. Heenen, and P. Bonche

Precise measurement of α_K for the $M4$ transition from $^{193}\mathrm{Ir}^m$: A test of internal-conversion theory *(11 pages)* 054305
N. Nica, J. C. Hardy, V. E. Iacob, S. Raman, C. W. Nestor, Jr., and M. B. Trzhaskovskaya

Effect of different baryon impurities *(6 pages)* 054306
Yu-Hong Tan, Xian-Hui Zhong, Chong-Hai Cai, and Ping-Zhi Ning

Cluster-shell competition in light nuclei *(6 pages)* 054307
N. Itagaki, S. Aoyama, S. Okabe, and K. Ikeda

Correlations and spectral functions in asymmetric nuclear matter *(8 pages)* 054308
Kh. S. A. Hassaneen and H. Müther

Hyperons in a relativistic mean-field approach to asymmetric nuclear matter *(10 pages)* 054309
J. Kotulič Bunta and Štefan Gmuca

Effective operator treatment of the Lipkin model *(6 pages)* 054310
K. J. Abraham and J. P. Vary

Isospin symmetry of $T_z = \pm 3/2 \rightarrow \pm 1/2$ Gamow-Teller transitions in $A = 41$ nuclei *(14 pages)* 054311
Y. Fujita, Y. Shimbara, T. Adachi, G. P. A. Berg, B. A. Brown, H. Fujita, K. Hatanaka, J. Kamiya, K. Nakanishi, Y. Sakemi, S. Sasaki, Y. Shimizu, Y. Tameshige, M. Uchida, T. Wakasa, and M. Yosoi

Low-lying levels of ^{9}B *(6 pages)* 054312
R. Sherr and H. T. Fortune

Anomalous properties of quadrupole collective states in ^{136}Te and beyond *(8 pages)* 054313
Noritaka Shimizu, Takaharu Otsuka, Takahiro Mizusaki, and Michio Honma

Highly deformed Bands in ^{175}Hf *(8 pages)* 054314
D. T. Scholes, D. M. Cullen, F. G. Kondev, R. V. F. Janssens, M. P. Carpenter, D. J. Hartley, M. K. Djongolov, G. Sletten, G. Hagemann, C. Wheldon, P. M. Walker, K. Abu Saleem, I. Ahmad, D. L. Balabanski, P. Chowdhury, M. Danchev, G. D. Dracoulis, H. M. El-Masri, J. Goon, A. Heinz, R. A. Kaye, T. L. Khoo, T. Lauritsen, C. J. Lister, E. F. Moore, L. L. Riedinger, M. A. Riley, D. Seweryniak, I. Shestakova, I. Wiedenhöver, O. Zeidan, and Jing-ye Zhang

Projected multicluster model with Jastrow and linear state dependent correlations for $12 \leqslant A \leqslant 16$ nuclei *(10 pages)* 054315
E. Buendía, F. J. Gálvez, and A. Sarsa

(Continued)

PHYSICAL REVIEW C THIRD SERIES, VOLUME 70, NUMBER 5 NOVEMBER 2004

Deformations and electromagnetic moments in carbon and neon isotopes *(14 pages)* 054316
H. Sagawa, X. R. Zhou, X. Z. Zhang, and Toshio Suzuki

Energy systematics of low-lying collective states within the framework of the interacting vector boson model *(8 pages)* 054317
H. G. Ganev, V. P. Garistov, A. I. Georgieva, and J. P. Draayer

Neutron-rich In and Cd isotopes close to the doubly magic ^{132}Sn *(10 pages)* 054318
A. Scherillo, J. Genevey, J. A. Pinston, A. Covello, H. Faust, A. Gargano, R. Orlandi, G. S. Simpson, I. Tsekhanovich, and N. Warr

Nuclear structure in the vicinity of $N=Z=28$ ^{56}Ni *(7 pages)* 054319
K. L. Yurkewicz, D. Bazin, B. A. Brown, C. M. Campbell, J. A. Church, D. C. Dinca, A. Gade, T. Glasmacher, M. Honma, T. Mizusaki, W. F. Mueller, H. Olliver, T. Otsuka, L. A. Riley, and J. R. Terry

Density distribution of ^{17}B from a reaction cross-section measurement *(6 pages)* 054320
Y. Yamaguchi, C. Wu, T. Suzuki, A. Ozawa, D. Q. Fang, M. Fukuda, N. Iwasa, T. Izumikawa, H. Jeppesen, R. Kanungo, R. Koyama, T. Ohnishi, T. Ohtsubo, W. Shinozaki, T. Suda, M. Takahashi, and I. Tanihata

Skyrme energy functional and low lying 2^+ states in Sn, Cd, and Te isotopes *(13 pages)* 054321
P. Fleischer, P. Klüpfel, P.-G. Reinhard, and J. A. Maruhn

Patterns of the ground states in the presence of random interactions: Nucleon systems *(8 pages)* 054322
Y. M. Zhao, A. Arima, N. Shimizu, K. Ogawa, N. Yoshinaga, and O. Scholten

High-spin states in ^{43}Sc *(7 pages)* 054323
T. Morikawa, M. Nakamura, T. Sugimitsu, H. Kusakari, M. Oshima, Y. Toh, M. Koizumi, A. Kimura, J. Goto, Y. Hatsukawa, and M. Sugawara

Cluster form factor calculation in the *ab initio* no-core shell model *(16 pages)* 054324
Petr Navrátil

Quantum Monte Carlo calculations of excited states in $A=6-8$ nuclei *(11 pages)* 054325
Steven C. Pieper, R. B. Wiringa, and J. Carlson

Nuclear Reactions

Higher order effects in the $^{16}O(d,p)^{17}O$ and $^{16}O(d,n)^{17}F$ transfer reactions *(8 pages)* 054601
M. Assunção, R. Lichtenthäler, V. Guimarães, A. Lépine-Szily, G. F. Lima, and A. M. Moro

Extended sudden approximation modeling of high-energy nucleon-removal reactions *(14 pages)* 054602
F. Carstoiu, E. Sauvan, N. A. Orr, and A. Bonaccorso

Measurements of neutron-induced fission cross sections for ^{209}Bi, ^{nat}Pb, ^{208}Pb, ^{197}Au, ^{nat}W, and ^{181}Ta in the intermediate energy region *(16 pages)* 054603
A. N. Smirnov, V. P. Eismont, N. P. Filatov, J. Blomgren, H. Condé, A. V. Prokofiev, P.-U. Renberg, and N. Olsson

General structure of a two-body operator for spin-$\frac{1}{2}$ particles *(9 pages)* 054604
S. N. Ershov

Threshold anomaly with weakly bound projectiles: Elastic scattering of ^{9}Be+^{27}Al *(5 pages)* 054605
P. R. S. Gomes, R. M. Anjos, C. Muri, J. Lubian, I. Padron, L. C. Chamon, R. Liguori Neto, N. Added, J. O. Fernández Niello, G. V. Martí, O. A. Capurro, A. J. Pacheco, J. E. Testoni, and D. Abriola

(Continued)

PHYSICAL REVIEW C THIRD SERIES, VOLUME 70, NUMBER 5 NOVEMBER 2004

Coulomb and nuclear breakup of a halo nucleus ^{11}Be *(12 pages)* 054606
N. Fukuda, T. Nakamura, N. Aoi, N. Imai, M. Ishihara, T. Kobayashi, H. Iwasaki, T. Kubo, A. Mengoni, M. Notani, H. Otsu, H. Sakurai, S. Shimoura, T. Teranishi, Y. X. Watanabe, and K. Yoneda

High-resolution velocity measurements on fully identified light nuclides produced in ^{56}Fe+hydrogen and ^{56}Fe+titanium systems *(21 pages)* 054607
P. Napolitani, K.-H. Schmidt, A. S. Botvina, F. Rejmund, L. Tassan-Got, and C. Villagrasa

Structure of the ^{11}Li continuum from breakup on proton target *(9 pages)* 054608
S. N. Ershov, B. V. Danilin, J. S. Vaagen, A. A. Korsheninnikov, and I. J. Thompson

Hadron attenuation in deep inelastic lepton-nucleus scattering *(24 pages)* 054609
T. Falter, W. Cassing, K. Gallmeister, and U. Mosel

Refractive effects in the scattering of loosely bound nuclei *(14 pages)* 054610
Florin Carstoiu, Livius Trache, Robert E. Tribble, and Carl A. Gagliardi

Level densities and γ-ray strength functions in ^{170,171,172}Yb *(8 pages)* 054611
U. Agvaanluvsan, A. Schiller, J. A. Becker, L. A. Bernstein, P. E. Garrett, M. Guttormsen, G. E. Mitchell, J. Rekstad, S. Siem, A. Voinov, and W. Younes

Effects of rescattering in $(e,e'p)$ reactions within a semiclassical model *(10 pages)* 054612
C. Barbieri and L. Lapikás

Measurement of neutron elastic scattering cross sections for ^{12}C, ^{40}Ca, and ^{208}Pb at energies from 65 to 225 MeV *(20 pages)* 054613
J. H. Osborne, F. P. Brady, J. L. Romero, J. L. Ullmann, D. S. Sorenson, A. Ling, N. S. P. King, R. C. Haight, J. Rapaport, R. W. Finlay, E. Bauge, J. P. Delaroche, and A. J. Koning

Relativistic Nuclear Collisions

Lepton interferometry in relativistic heavy ion collisions: A case study *(5 pages)* 054901
Jan-e Alam, Bedangadas Mohanty, A. Rahaman, Sourav Sarkar, and Bikash Sinha

Dihadron correlation in jets produced in heavy-ion collisions *(8 pages)* 054902
Rudolph C. Hwa and C. B. Yang

Multifractal behavior of nuclear fragments in high-energy leptonic interactions *(8 pages)* 054903
Dipak Ghosh, Argha Deb, Madhumita Banerjee Lahiri, Parthasarathi Ghosh, Syed Imtiaz Ahmed, and Prabir Kumar Halder

Jet quenching in high energy nuclear collisions and the quark-gluon plasma *(8 pages)* 054904
Yu. A. Tarasov

Rapidity distribution of gluons in the classical field model for heavy ion collisions *(5 pages)* 054905
T. Lappi

Transverse momentum versus multiplicity fluctuations in high-energy nuclear collisions *(5 pages)* 054906
St. Mrówczyński, M. Rybczyński, and Z. Włodarczyk

(Continued)

PHYSICAL REVIEW C **THIRD SERIES, VOLUME 70, NUMBER 5** **NOVEMBER 2004**

Measurements of transverse energy distributions in Au+Au collisions at $\sqrt{s_{NN}}$=200 GeV *(14 pages)* 054907

J. Adams, M. M. Aggarwal, Z. Ahammed, J. Amonett, B. D. Anderson, D. Arkhipkin, G. S. Averichev, Y. Bai, J. Balewski, O. Barannikova, L. S. Barnby, J. Baudot, S. Bekele, V. V. Belaga, R. Bellwied, J. Berger, B. I. Bezverkhny, S. Bharadwaj, V. S. Bhatia, H. Bichsel, A. Billmeier, L. C. Bland, C. O. Blyth, B. E. Bonner, M. Botje, A. Boucham, A. Brandin, A. Bravar, M. Bystersky, R. V. Cadman, X. Z. Cai, H. Caines, M. Calderón de la Barca Sánchez, J. Carroll, J. Castillo, D. Cebra, Z. Chajecki, P. Chaloupka, S. Chattopdhyay, H. F. Chen, Y. Chen, J. Cheng, M. Cherney, A. Chikanian, W. Christie, J. P. Coffin, T. M. Cormier, J. G. Cramer, H. J. Crawford, D. Das, S. Das, M. M. de Moura, A. A. Derevschikov, L. Didenko, T. Dietel, W. J. Dong, X. Dong, J. E. Draper, F. Du, A. K. Dubey, V. B. Dunin, J. C. Dunlop, M. R. Dutta Mazumdar, V. Eckardt, W. R. Edwards, L. G. Efimov, V. Emelianov, J. Engelage, G. Eppley, B. Erazmus, M. Estienne, P. Fachini, J. Faivre, R. Fatemi, J. Fedorisin, K. Filimonov, P. Filip, E. Finch, V. Fine, Y. Fisyak, K. J. Foley, K. Fomenko, J. Fu, C. A. Gagliardi, J. Gans, M. S. Ganti, L. Gaudichet, F. Geurts, V. Ghazikhanian, P. Ghosh, J. E. Gonzalez, O. Grachov, O. Grebenyuk, D. Grosnick, S. M. Guertin, Y. Guo, A. Gupta, T. D. Gutierrez, T. J. Hallman, A. Hamed, D. Hardtke, J. W. Harris, M. Heinz, T. W. Henry, S. Hepplemann, B. Hippolyte, A. Hirsch, E. Hjort, G. W. Hoffmann, H. Z. Huang, S. L. Huang, E. W. Hughes, T. J. Humanic, G. Igo, A. Ishihara, P. Jacobs, W. W. Jacobs, M. Janik, H. Jiang, P. G. Jones, E. G. Judd, S. Kabana, K. Kang, M. Kaplan, D. Keane, V. Yu. Khodyrev, J. Kiryluk, A. Kisiel, E. M. Kislov, J. Klay, S. R. Klein, A. Klyachko, D. D. Koetke, T. Kollegger, M. Kopytine, L. Kotchenda, M. Kramer, P. Kravtsov, V. I. Kravtsov, K. Krueger, C. Kuhn, A. I. Kulikov, A. Kumar, C. L. Kunz, R. Kh. Kutuev, A. A. Kuznetsov, M. A. C. Lamont, J. M. Landgraf, S. Lange, F. Laue, J. Lauret, A. Lebedev, R. Lednicky, S. Lehocka, M. J. LeVine, C. Li, Q. Li, Y. Li, S. J. Lindenbaum, M. A. Lisa, F. Liu, L. Liu, Q. J. Liu, Z. Liu, T. Ljubicic, W. J. Llope, H. Long, R. S. Longacre, M. Lopez-Noriega, W. A. Love, Y. Lu, T. Ludlam, D. Lynn, G. L. Ma, J. G. Ma, Y. G. Ma, D. Magestro, S. Mahajan, D. P. Mahapatra, R. Majka, L. K. Mangotra, R. Manweiler, S. Margetis, C. Markert, L. Martin, J. N. Marx, H. S. Matis, Yu. A. Matulenko, C. J. McClain, T. S. McShane, F. Meissner, Yu. Melnick, A. Meschanin, M. L. Miller, Z. Milosevich, N. G. Minaev, C. Mironov, A. Mischke, D. Mishra, J. Mitchell, B. Mohanty, L. Molnar, C. F. Moore, M. J. Mora-Corral, D. A. Morozov, V. Morozov, M. G. Munhoz, B. K. Nandi, T. K. Nayak, J. M. Nelson, P. K. Netrakanti, V. A. Nikitin, L. V. Nogach, B. Norman, S. B. Nurushev, G. Odyniec, A. Ogawa, V. Okorokov, M. Oldenburg, D. Olson, S. K. Pal, Y. Panebratsev, S. Y. Panitkin, A. I. Pavlinov, T. Pawlak, T. Peitzmann, V. Perevoztchikov, C. Perkins, W. Peryt, V. A. Petrov, S. C. Phatak, R. Picha, M. Planinic, J. Pluta, N. Porile, J. Porter, A. M. Poskanzer, M. Potekhin, E. Potrebenikova, B. V. K. S. Potukuchi, D. Prindle, C. Pruneau, J. Putschke, G. Rai, G. Rakness, R. Raniwala, S. Raniwala, O. Ravel, R. L. Ray, S. V. Razin, D. Reichhold, J. G. Reid, G. Renault, F. Retiere, A. Ridiger, H. G. Ritter, J. B. Roberts, O. V. Rogachevskiy, J. L. Romero, A. Rose, C. Roy, L. Ruan, I. Sakrejda, S. Salur, J. Sandweiss, I. Savin, P. S. Sazhin, J. Schambach, R. P. Scharenberg, N. Schmitz, L. S. Schroeder, K. Schweda, J. Seger, P. Seyboth, E. Shahaliev, M. Shao, W. Shao, M. Sharma, W. Q. Shen, K. E. Shestermanov, S. S. Shimanskiy, F. Simon, R. N. Singaraju, G. Skoro, N. Smirnov, R. Snellings, G. Sood, P. Sorensen, J. Sowinski, J. Speltz, H. M. Spinka, B. Srivastava, A. Stadnik, T. D. S. Stanislaus, R. Stock, A. Stolpovsky, M. Strikhanov, B. Stringfellow, A. A. P. Suaide, E. Sugarbaker, C. Suire, M. Sumbera, B. Surrow, T. J. M. Symons, A. Szanto de Toledo, P. Szarwas, A. Tai, J. Takahashi, A. H. Tang, T. Tarnowsky, D. Thein, J. H. Thomas, S. Timoshenko, M. Tokarev, T. A. Trainor, S. Trentalange, R. E. Tribble, O. Tsai, J. Ulery, T. Ullrich, D. G. Underwood, A. Urkinbaev, G. Van Buren, M. van Leeuwen, A. M. Vander Molen, R. Varma, I. M. Vasilevski, A. N. Vasiliev, R. Vernet, S. E. Vigdor, V. P. Viyogi, S. Vokal, S. A. Voloshin, M. Vznuzdaev, B. Waggoner, F. Wang, G. Wang, G. Wang, X. L. Wang, Y. Wang, Y. Wang, Z. M. Wang, H. Ward, J. W. Watson, J. C. Webb, R. Wells, G. D. Westfall, A. Wetzler, C. Whitten, Jr., H. Wieman, S. W. Wissink, R. Witt, J. Wood, J. Wu, N. Xu, Z. Xu, Z. Z. Xu, E. Yamamoto, P. Yepes, V. I. Yurevich, Y. V. Zanevsky,

(Continued)

PHYSICAL REVIEW C THIRD SERIES, VOLUME 70, NUMBER 5 NOVEMBER 2004

H. Zhang, W. M. Zhang, Z. P. Zhang, P. A. Zolnierczuk, R. Zoulkarneev, Y. Zoulkarneeva, and A. N. Zubarev (STAR Collaboration)

Projected three-pion correlation functions *(6 pages)* 054908
Ulrich Heinz and Alex Sugarbaker

Hadronic Physics and QCD

Glueball enhancements in $p(\gamma, VV)p$ through vector meson dominance *(8 pages)* 055201
Stephen R. Cotanch and Robert A. Williams

Generalized sum rules of the nucleon in the constituent quark model *(12 pages)* 055202
M. Gorchtein, D. Drechsel, M. M. Giannini, E. Santopinto, and L. Tiator

Hadronic interactions of the J/ψ and Adler's theorem *(10 pages)* 055203
A. Bourque, C. Gale, and K. L. Haglin

Liquid-gas phase transition in nuclear matter including strangeness *(8 pages)* 055204
P. Wang, D. B. Leinweber, A. W. Thomas, and A. G. Williams

Light scalar mesons in the improved ladder QCD *(9 pages)* 055205
Toru Umekawa, Kenichi Naito, Makoto Oka, and Makoto Takizawa

Electroweak Interaction, Symmetries

P- and *T*-odd two-nucleon interaction and the deuteron electric dipole moment *(9 pages)* 055501
C.-P. Liu and R. G. E. Timmermans

Neutrino-nucleus interaction rates at a low-energy β-beam facility *(6 pages)* 055502
Julien Serreau and Cristina Volpe

Inclusive quasielastic charged-current neutrino-nucleus reactions *(23 pages)* 055503
J. Nieves, J. E. Amaro, and M. Valverde

Nuclear Astrophysics

Energy dependence of the astrophysical *S* factor for the ^{6}Li$(p,\gamma)^7$Be reaction *(8 pages)* 055801
R. M. Prior, M. C. Spraker, A. M. Amthor, K. J. Keeter, S. O. Nelson, A. Sabourov, K. Sabourov, A. Tonchev, M. Ahmed, J. H. Kelley, D. R. Tilley, H. R. Weller, and H. M. Hofmann

Nuclear three-body force effect on a kaon condensate in neutron star matter *(8 pages)* 055802
W. Zuo, A. Li, Z. H. Li, and U. Lombardo

Neutrino scattering off pair-breaking and collective excitations in superfluid neutron matter and in color-flavor-locked quark matter *(15 pages)* 055803
Joydip Kundu and Sanjay Reddy

BRIEF REPORTS

Correlated two-pion exchange in peripheral *NN* scattering *(4 pages)* 057001
Murat M. Kaskulov and Heinz Clement

Isospin constraints on angular momentum truncated wave functions *(3 pages)* 057301
Shadow J. Q. Robinson and Larry Zamick

Critical densities for the Skyrme type effective interactions *(5 pages)* 057302
B. K. Agrawal, S. Shlomo, and V. Kim Au

(Continued)

PHYSICAL REVIEW C **THIRD SERIES, VOLUME 70, NUMBER 5** **NOVEMBER 2004**

Properties of the $\pi i_{13/2} \otimes \nu i_{13/2}$ band in odd-odd ^{184}Au *(4 pages)* 057303
Y. H. Zhang, Y. D. Fang, G. de Angelis, N. Marginean, A. Gadea, D. R. Napoli, M. Axiotis, C. Rusu, T. Martinez, H. L. Wang, X. H. Zhou, W. T. Guo, M. L. Liu, Y. X. Guo, X. G. Lei, M. Oshima, and Y. Toh

Momentum distribution in heavy deformed nuclei: Role of effective mass *(4 pages)* 057304
V. O. Nesterenko, V. P. Likhachev, P.-G. Reinhard, V. V. Pashkevich, W. Kleinig, and J. Mesa

Core excited states in the $A=51$ mirror nuclei *(4 pages)* 057305
J. Ekman, C. Andreoiu, C. Fahlander, M. N. Mineva, D. Rudolph, M. A. Bentley, S. J. Williams, R. J. Charity, E. Ideguchi, W. Reviol, D. G. Sarantites, V. Tomov, R. M. Clark, M. Cromaz, P. Fallon, A. O. Macchiavelli, M. P. Carpenter, and D. Seweryniak

β decay of ^{26}Ne *(5 pages)* 057306
L. Weissman, O. Arndt, U. Bergmann, J. Cederkall, I. Dillmann, O. Hallmann, L. Fraile, S. Franchoo, L. Gaudefroy, U. Köster, K. L. Kratz, A. F. Lisetskiy, B. Pfeiffer, O. Sorlin, and S. Tabor

Extended RPA with ground-state correlations in a solvable model *(3 pages)* 057307
S. Takahara, M. Tohyama, and P. Schuck

Near-yrast, medium-spin structure of the ^{107}Tc nucleus *(4 pages)* 057308
W. Urban, T. Rząca-Urban, J. L. Durell, A. G. Smith, and I. Ahmad

Simple functional form for the $n+^{208}$Pb total cross section between 5 and 600 MeV *(4 pages)* 057601
P. K. Deb, K. Amos, and S. Karataglidis

Accurate approximation for the Coulomb potential between deformed nuclei *(4 pages)* 057602
B. V. Carlson, L. C. Chamon, and L. R. Gasques

Parity violation in hot QCD: How to detect it *(2 pages)* 057901
Sergei A. Voloshin

Pointlike constituent quarks and scattering equivalences *(4 pages)* 058201
Evan Sengbusch and W. N. Polyzou

δ meson effects on stellar matter *(5 pages)* 058801
D. P. Menezes and C. Providência

Selected Abstracts from Other Physical Review Journals i
Cumulative Author Index vii