Current Rapid Communications

Rapid Communications in Physical Review are short reports of important new work which are of sufficient interest to be given priority handling in the publication process. The following papers have been accepted for publication as Rapid Communications and appear as indicated in the designated Physical Review issues.

Physical Review B, Vol. 52, 1 August 1995, Issue 6

Random-matrix-theory approach to the intensity distributions of waves propagating in a random medium ..... Eugene Kogan and Moshe Kaveh 3813

Origin of the $\langle 1\ \frac{1}{2}\ 0\rangle$ atomic short-range order in Au-rich Au-Fe alloys ..... M. F. Ling, J. B. Staunton, D. D. Johnson, and F. J. Pinski 3816

Coulomb gap at finite temperatures ..... Masoud Sarvestani, Michael Schreiber, and Thomas Vojta 3820

Coupled quasiparticle-boson systems: The semiclassical approximation and discrete nonlinear Schrödinger equation ..... M. I. Salkola, A. R. Bishop, V. M. Kenkre, and S. Raghavan 3824

Intrinsic localized spin modes in ferromagnetic chains with on-site anisotropy ..... R. F. Wallis, D. L. Mills, and A. D. Boardman 3828

Electron interaction on the giant magnetoresistance in the perpendicular geometry ..... S. T. Chui 3832

Monte Carlo study of the Heisenberg antiferromagnet on the triangular lattice ..... B. W. Southern and H-J. Xu 3836

Quasiparticle spectrum in a nearly antiferromagnetic Fermi liquid: Shadow and flat bands ..... Andrey V. Chubukov 3840

Onset of superconductivity in the antiferromagnetically ordered state of single-crystal $DyNi_2B_2C$ ..... B. K. Cho, P. C. Canfield, and D. C. Johnston 3844

Supercurrent force on Andreev-reflected quasiparticles and excess currents ..... B. Götzelmann, S. Hofmann, and R. Kümmel 3848

Surface barrier effects in grain-aligned $HgBa_2CuO_{4+\delta}$, $HgBa_2CaCu_2O_{6+\delta}$, and $HgBa_2Ca_2Cu_3O_{8+\delta}$ compounds ..... J. A. Lewis, V. M. Vinokur, J. Wagner, and D. Hinks 3852

Transport properties of extended-*s*-state superconductors ..... L. S. Borkowski, P. J. Hirschfeld, and W. O. Putikka 3856

Superconducting phase of a two-chain Hubbard model ..... Takashi Yanagisawa, Yukihiro Shimoi, and Kunihiko Yamaji 3860

Competition between magnetism and superconductivity in $TmNi_2B_2C$ observed by muon-spin rotation ..... D. W. Cooke, J. L. Smith, S. J. Blundell, K. H. Chow, P. A. Pattenden, F. L. Pratt, S. F. J. Cox, S. R. Brown, A. Morrobel-Sosa, R. L. Lichti, L. C. Gupta, R. Nagarajan, Z. Hossain, C. Mazumdar, and C. Godart 3864

Weak localization coexisting with a magnetic field in a normal-metal–superconductor microbridge ..... P. W. Brouwer and C. W. J. Beenakker 3868

Multilayer pinning in *a*-axis-oriented $EuBa_2Cu_3O_7/PrBa_2Cu_3O_7$ superconducting superlattices ..... J. I. Martin, M. Velez, and J. L. Vicent 3872

Mixed-state quasiparticle spectrum for *d*-wave superconductors ..... Yong Wang and A. H. MacDonald 3876

Evidence for two vortex phase transitions in $Tl_2Ba_2CaCu_2O_8$ thin films ..... J. Deak, M. McElfresh, D. W. Face, and W. L. Holstein 3880

Effect of Zn doping on charge transport in $YBa_2Cu_3O_{7-y}$ ..... K. Mizuhashi, K. Takenaka, Y. Fukuzumi, and S. Uchida 3884

Variations of electronic states in $La_{2-x}Sr_xCuO_4$ ($x = 0$ to 0.30) investigated by scanning tunneling spectroscopy ..... D. Matsuura, H. Miki, S. Matunari, M. Kanai, and T. Kawai 3888

Physical Review C, Vol. 52, August 1995, Issue 2

Study of the isospin response of the ^{4}He continuum using the $^4\mathrm{He}(p,p'X)$ reaction ..... B. A. Raue, L. C. Bland, D. S. Carman, G. M. Huber, B. C. Markham, D. W. Miller, K. Murphy, S. F. Pate, J. A. Templon, B. Brinkmöller, D. Dehnhard, and S. M. Sterbenz 445

Intruder bands extended in ^{175}Re and ^{177}Ir: Deformation changes and interaction at the alignment of $i_{13/2}$ neutrons ..... R. A. Bark, S. W. Ødegård, R. Bengtsson, I. G. Bearden, G. B. Hagemann, B. Herskind, F. Ingebretsen, S. Leoni, H. Ryde, T. Shizuma, K. Strähle, P. O. Tjøm, and J. Wrzesinski 450

New measurements of $^2\mathrm{H}(\vec{\gamma},p)n$ and spin problems in coupled $N\Delta/NN$ interactions ..... G. Blanpied, M. Blecher, A. Caracappa, C. Djalali, M-A. Duval, G. Giordano, K. Hicks, S. Hoblit, M. Khandaker, O. C. Kistner, G. Matone, L. Miceli, W. K. Mize, B. M. Preedom, D. Rebreyend, A. M. Sandorfi, C. Schaerf, R. M. Sealock, C. E. Thorn, S. T. Thornton, K. Vaziri, C. S. Whisnant, X. Zhao, P. Wilhelm, and H. Arenhövel 455

Study of the $^{18}\mathrm{F}(p,\alpha)^{15}$O reaction at astrophysical energies using a ^{18}F beam ..... K. E. Rehm, M. Paul, A. D. Roberts, D. J. Blumenthal, J. Gehring, D. Henderson, C. L. Jiang, J. Nickles, J. Nolen, R. C. Pardo, J. P. Schiffer, and R. E. Segel 460

(Continued)

Current Rapid Communications-*Continued*

Laser oriented ^{36}K for time reversal symmetry measurements ..... A. R. Young, W. S. Anderson, F. P. Calaprice, G. D. Cates, G. L. Jones, D. A. Krieger, and R. B. Vogelaar 464
Strong dipole excitations around 1.8 MeV in ^{238}U ..... A. Zilges, P. von Brentano, R.-D. Herzberg, U. Kneissl, J. Margraf, H. Maser, N. Pietralla, and H. H. Pitz 468
Relations between isoscalar charge form factors of two- and three-nucleon systems ..... H. Henning, J. Adam, Jr., P. U. Sauer, and A. Stadler 471
Suppression of dilepton production in hot hadronic matter ..... Chungsik Song, Su Houng Lee, and Che Ming Ko 476
Inclusion of fluctuations in Boltzmann-Uehling-Uhlenbeck dynamics: A method of simulation ..... S. Chattopadhyay 480
Pion-nucleus scattering and baryon resonances in the nuclear medium ..... C. M. Chen, D. J. Ernst, M. F. Jiang, and Mikkel B. Johnson 485
Measuring hadron properties at finite temperature ..... David Seibert and Charles Gale 490

Physical Review E, Vol. 52, August 1995, Issue 2

Desynchronization by periodic orbits ..... J. F. Heagy, T. L. Carroll, and L. M. Pecora 1253
Surface deconstruction and roughening in the multiziggurat model of wetting ..... D. B. Abraham, L. Fontes, C. M. Newman, and M. S. T. Piza 1257
Growth equation with a conservation law ..... Kent Baekgaard Lauritsen 1261
On-off intermittency in a coupled-map lattice system ..... Fagen Xie, Gang Hu, and Zhilin Qu 1265
Unusual universality of branching interfaces in random media ..... Mehran Kardar, Attilio L. Stella, Giovanni Sartoni, and Bernard Derrida 1269
Internal surface, orientational order, and distribution of a polymer network in a liquid crystal matrix ..... G. P. Crawford, A. Scharkowski, Y. K. Fung, J. W. Doane, and S. Zumer 1273
Transverse interlayer order in lyotropic smectic liquid crystals ..... René van Roij, Peter Bolhuis, Bela Mulder, and Daan Frenkel 1277
Flow topology associated with disjoint eddies in an asymmetric film-splitting problem ..... P. J. Wicks, M. Decré, Ph. Planquart, and J. M. Buchlin 1281
Step-by-step thinning of free-standing films above the smectic-*A*–nematic phase transition ..... E. I. Demikhov, V. K. Dolganov, and K. P. Meletov 1285
Ginzburg criterion for the mean-field to three-dimensional Ising crossover in polymer blends ..... D. Schwahn, T. Schmackers, and K. Mortensen 1288
Renormalization group analysis of the anisotropic Kardar-Parisi-Zhang equation with spatially correlated noise ..... H. Jeong, B. Kahng, and D. Kim 1292
Anomalous roughness exponent of growing interfaces in a disordered medium ..... Juan M. López 1296
Folding RNA with the minimal loss of entropy ..... Ariel Fernández, Hugo Arias, and Diego Guerín 1299
Self-focusing of ion channels in cell adhesion ..... Peter Fromherz 1303
Effects of laser spatial incoherence with finite correlation length on the space-time behavior of backscattering instabilities ..... Philippe Mounaix 1306
Spectral distribution of drums with fractal perimeters: The Weyl-Berry-Lapidus conjecture ..... Yutaka Hobiki, Kousuke Yakubo, and Tsuneyoshi Nakayama 1310