PHYSICAL REVIEW LETTERS

Contents

VOLUME 78, NUMBER 24 16 June 1997

Elementary Particles and Fields

Monte Carlo Solution to the Balitsky-Fadin-Kuraev-Lipatov Equation for Resummation in Perturbative QCD 4531
Carl R. Schmidt

Evidence for W^+W^- Production in $\overline{p}p$ Collisions at $\sqrt{s} = 1.8$ TeV 4536
F. Abe *et al.* (CDF Collaboration)

Prospects for and Implications of Measuring the Higgs Boson to Photon-Photon Branching Ratio at the Next Linear e^+e^- Collider 4541
John F. Gunion and Patrick C. Martin

Nuclear Physics

$K^\pi = 0^+$ and 4^+ Two-Phonon γ-Vibrational States in ^{166}Er 4545
P. E. Garrett, M. Kadi, Min Li, C. A. McGrath, V. Sorokin, Minfang Yeh, and S. W. Yates

Pairing Correlation and Quadrupole Deformation Effects on the ^{14}C Decay 4549
D. S. Delion, A. Insolia, and R. J. Liotta

Atomic, Molecular, and Optical Physics

Breakdown of the Independent Particle Approximation in High-Energy Photoionization 4553
E. W. B. Dias, H. S. Chakraborty, P. C. Deshmukh, Steven T. Manson, O. Hemmers, P. Glans, D. L. Hansen, H. Wang, S. B. Whitfield, D. W. Lindle, R. Wehlitz, J. C. Levin, I. A. Sellin, and R. C. C. Perera

Stabilized Hollow Ions Extracted in Vacuum 4557
S. Ninomiya, Y. Yamazaki, F. Koike, H. Masuda, T. Azuma, K. Komaki, K. Kuroki, and M. Sekiguchi

Nonlinear Dynamics, Fluid Dynamics, Classical Optics, Etc.

From High Dimensional Chaos to Stable Periodic Orbits: The Structure of Parameter Space 4561
Ernest Barreto, Brian R. Hunt, Celso Grebogi, and James A. Yorke

Plasma and Beam Physics

Damping of the Transverse Head-Tail Instability by Periodic Modulation of the Chromaticity 4565
Wen-Hao Cheng, Andrew M. Sessler, and Jonathan S. Wurtele

Gamma-Ray Production in a Storage Ring Free-Electron Laser 4569
V. N. Litvinenko, B. Burnham, M. Emamian, N. Hower, J. M. J. Madey, P. Morcombe, P. G. O'Shea, S. H. Park, R. Sachtschale, K. D. Straub, G. Swift, P. Wang, Y. Wu, R. S. Canon, C. R. Howell, N. R. Roberson, E. C. Schreiber, M. Spraker, W. Tornow, H. R. Weller, I. V. Pinayev, N. G. Gavrilov, M. G. Fedotov, G. N. Kulipanov, G. Y. Kurkin, S. F. Mikhailov, V. M. Popik, A. N. Skrinsky, N. A. Vinokurov, B. E. Norum, A. Lumpkin, and B. Yang

Electron Thermal Transport Barrier and Magnetohydrodynamic Activity Observed in Tokamak Plasmas with Negative Central Shear 4573
M. R. de Baar, G. M. D. Hogeweij, N. J. Lopes Cardozo, A. A. M. Oomens, and F. C. Schüller

Effect of Sheath Curvature on Rayleigh-Taylor Mitigation in High-Velocity Uniform-Fill, *Z*-Pinch Implosions 4577
M. R. Douglas, C. Deeney, and N. F. Roderick

(Continued on Third Cover)

CODEN: PRLTAO 78 (24), 4531–4670 (16 June 1997)

Condensed Matter: Structure, Etc.

Aging Effects in a Lennard-Jones Glass 4581
Walter Kob and Jean-Louis Barrat
Ultrafast Raman Spectroscopy of Shock Fronts in Molecular Solids 4585
Guray Tas, Jens Franken, Selezion A. Hambir, David E. Hare, and Dana D. Dlott
Melting of LiF and NaCl to 1 Mbar: Systematics of Ionic Solids at Extreme Conditions 4589
Reinhard Boehler, Marvin Ross, and David B. Boercker
Novel Scaling of Multiplicity Distributions in Sequential-Fragmentation and Percolation Processes 4593
Robert Botet, Marek Płoszajczak, and Vito Latora
Fast Diffusion of a Lennard-Jones Cluster on a Crystalline Surface 4597
Pierre Deltour, Jean-Louis Barrat, and Pablo Jensen
Self-Similar Spatial Ordering of Clusters on Surfaces during Ostwald Ripening 4601
G. R. Carlow and M. Zinke-Allmang
Two Dimensional Phase Separation for Co Adsorbed on Si(111) 4605
R. J. Phaneuf, Y. Hong, S. Horch, and P. A. Bennett

Condensed Matter: Electronic Properties, Etc.

Phase Separation at all Interaction Strengths in the *t-J* Model 4609
C. Stephen Hellberg and E. Manousakis
Evidence of a Hybridization Gap in ''Semimetallic'' InAs/GaSb Systems 4613
M. J. Yang, C. H. Yang, B. R. Bennett, and B. V. Shanabrook
Ferromagnetic Order Induced by Photogenerated Carriers in Magnetic III-V Semiconductor Heterostructures of (In,Mn)As/GaSb 4617
S. Koshihara, A. Oiwa, M. Hirasawa, S. Katsumoto, Y. Iye, C. Urano, H. Takagi, and H. Munekata
Fundamental Relation between Electrical and Thermoelectric Transport Coefficients in the Quantum Hall Regime 4621
B. Tieke, R. Fletcher, U. Zeitler, A. K. Geim, M. Henini, and J. C. Maan
Reentrant ac Magnetic Susceptibility in Josephson-Junction Arrays 4625
F. M. Araujo-Moreira, P. Barbara, A. B. Cawthorne, and C. J. Lobb
Magnetization Jump in a Model for Flux Lattice Melting at Low Magnetic Fields 4629
Seungoh Ryu and D. Stroud
Topological Defects in the Flux-Line Lattice and Their Relationship to the Critical Current of a Type-II Superconductor 4633
F. Pardo, F. De La Cruz, P. L. Gammel, C. S. Oglesby, E. Bucher, B. Batlogg, and D. J. Bishop
Observation of Quasimagnetic Structures in Rare-Earth-Based Icosahedral Quasicrystals 4637
Benoît Charrier, Bachir Ouladdiaf, and Denys Schmitt
Spin-Slip Structure and Central Peak Phenomena in Singlet-Doublet System: Praseodymium 4641
Per-Anker Lindgård
Quantum Tunneling of the Magnetization in an Iron Cluster Nanomagnet 4645
C. Sangregorio, T. Ohm, C. Paulsen, R. Sessoli, and D. Gatteschi
Observation of Coherent Surface Optical Phonon Oscillations by Time-Resolved Surface Second-Harmonic Generation 4649
Y. M. Chang, L. Xu, and H. W. K. Tom

Cross-Disciplinary Physics

Elastic Scattering in a Reactive Environment: NO on Ru(0001)-(1 × 1)H 4653
D. A. Butler, B. Berenbak, S. Stolte, and A. W. Kleyn
Yielding and Rearrangements in Disordered Emulsions 4657
P. Hébraud, F. Lequeux, J. P. Munch, and D. J. Pine
Theory of the Harmonic Multiplying Gyrotron Traveling Wave Amplifier 4661
K. R. Chu, H. Guo, and V. L. Granatstein
Synchrony in an Array of Integrate-and-Fire Neurons with Dendritic Structure 4665
P. C. Bressloff and S. Coombes

(Continued on Preceding Page)

Contents (Continued)

Comments

Comment on ‘‘Evidence of High Frequency Propagating Modes in Vitreous Silica’’ 4669
M. Foret, E. Courtens, R. Vacher, and J.-B. Suck

Benassi *et al.* Reply 4670
P. Benassi, M. Krisch, C. Masciovecchio, V. Mazzacurati, G. Monaco, G. Ruocco, F. Sette, and R. Verbeni