



Simulation of a porous matrix (gray) being clogged by a sediment (brown). The blue, green, and red indicate the magnitude of the flow velocity of the fluid that carries the sediment. [R. Jäger, M. Mendoza, and H. J. Herrmann, Phys. Rev. Lett. **119**, 124501 (2017)]

NEWSPAPER

PHYSICAL REVIEW LETTERS

Contents

Articles published 16 September–22 September 2017

VOLUME 119, NUMBER 12

22 September 2017

General Physics: Statistical and Quantum Mechanics, Quantum Information, etc.

Entanglement Hamiltonians for Chiral Fermions with Zero Modes	120401
Israel Klich, Diana Vaman, and Gabriel Wong	
Revealing Nonclassicality of Inaccessible Objects	120402
Tanjung Krisnanda, Margherita Zuppardo, Mauro Paternostro, and Tomasz Paterek	
Conditional Hybrid Nonclassicality	120403
E. Agudelo, J. Sperling, L. S. Costanzo, M. Bellini, A. Zavatta, and W. Vogel	
Gaussian Hypothesis Testing and Quantum Illumination	120501
Mark M. Wilde, Marco Tomamichel, Seth Lloyd, and Mario Berta	
Quantum Correlations in Nonlocal Boson Sampling	120502
Farid Shahandeh, Austin P. Lund, and Timothy C. Ralph	
Optimal Continuous Variable Quantum Teleportation with Limited Resources	120503
Pietro Liuzzo-Scorpo, Andrea Mari, Vittorio Giovannetti, and Gerardo Adesso	
Universal Quantum Computing with Measurement-Induced Continuous-Variable Gate Sequence in a Loop-Based Architecture	120504
Shuntaro Takeda and Akira Furusawa	
Contextuality as a Resource for Models of Quantum Computation with Qubits	120505
Juan Bermejo-Vega, Nicolas Delfosse, Dan E. Browne, Cihan Okay, and Robert Raussendorf	
Quantum Communication Using Coherent Rejection Sampling	120506
Anurag Anshu, Vamsi Krishna Devabathini, and Rahul Jain	

Elementary Particles and Fields

2D Stress Tensor for 4D Gravity	121601
Daniel Kapec, Prahar Mitra, Ana-Maria Raclariu, and Andrew Strominger	
Dark Matter Coannihilation with a Lighter Species	121801
Asher Berlin	

Nuclear Physics

Characterization of the ^{163}Ho Electron Capture Spectrum: A Step Towards the Electron Neutrino Mass Determination	122501
P. C.-O. Ranitzsch, C. Hassel, M. Wegner, D. Hengstler, S. Kempf, A. Fleischmann, C. Enss, L. Gastaldo, A. Herlert, and K. Johnston	
Mirror Charge Radii and the Neutron Equation of State	122502
B. Alex Brown	

(Continued Inside)

 Selected for a Viewpoint in *Physics*. Please visit <http://physics.aps.org/>.

By suggesting a few manuscripts each week, we hope to promote reading across fields. Please see our Announcement Phys. Rev. Lett. 98, 010001 (2007).

Copyright 2017 American Physical Society



Atomic, Molecular, and Optical Physics

Attosecond Electron Correlation Dynamics in Double Ionization of Benzene Probed with Two-Electron Angular Streaking Alexander H. Winney, Suk Kyoung Lee, Yun Fei Lin, Qing Liao, Pradip Adhikari, Gihan Basnayake, H. Bernhard Schlegel, and Wen Li	123201
Pair Potential with Submillikelvin Uncertainties and Nonadiabatic Treatment of the Halo State of the Helium Dimer Michał Przybytek, Wojciech Cencek, Bogumił Jeziorski, and Krzysztof Szalewicz	123401
Floquet Symmetry-Protected Topological Phases in Cold-Atom Systems I.-D. Potirniche, A. C. Potter, M. Schleier-Smith, A. Vishwanath, and N. Y. Yao	123601
Quantum Nonlinear Optics in Optomechanical Nanoscale Waveguides Hashem Zoubi and Klemens Hammerer	123602
Enhancing Sideband Cooling by Feedback-Controlled Light Massimiliano Rossi, Nenad Kralj, Stefano Zippilli, Riccardo Natali, Antonio Borrielli, Gregory Pandraud, Enrico Serra, Giovanni Di Giuseppe, and David Vitali	123603

Nonlinear Dynamics, Fluid Dynamics, Classical Optics, etc.

Role of Intrapulse Coherence in Carrier-Envelope Phase Stabilization Nils Raabe, Tianli Feng, Tobias Witting, Ayhan Demircan, Carsten Brée, and Günter Steinmeyer	123901
Generalized Magnetic Mirrors Wei Liu	123902
Mechanism behind Erosive Bursts In Porous Media R. Jäger, M. Mendoza, and H. J. Herrmann	124501

Condensed Matter: Structure, etc.

Low-Field-Triggered Large Magnetostriction in Iron-Palladium Strain Glass Alloys Shuai Ren, Dezhen Xue, Yuanchao Ji, Xiaolian Liu, Sen Yang, and Xiaobing Ren	125701
Simultaneous Deep Tunneling and Classical Hopping for Hydrogen Diffusion on Metals Wei Fang, Jeremy O. Richardson, Ji Chen, Xin-Zheng Li, and Angelos Michaelides	126001
Polarizing Oxygen Vacancies in Insulating Metal Oxides under a High Electric Field Mostafa Youssef, Krystyn J. Van Vliet, and Bilge Yildiz	126002

Condensed Matter: Electronic Properties, etc.

Rapid Transition of the Hole Rashba Effect from Strong Field Dependence to Saturation in Semiconductor Nanowires Jun-Wei Luo, Shu-Shen Li, and Alex Zunger	126401
Cascade of Magnetic-Field-Induced Lifshitz Transitions in the Ferromagnetic Kondo Lattice Material YbNi_4P_2 H. Pfau, R. Daou, S. Friedemann, S. Karbassi, S. Ghannadzadeh, R. Küchler, S. Hamann, A. Steppke, D. Sun, M. König, A. P. Mackenzie, K. Kliemt, C. Krellner, and M. Brando	126402
Plasmons in Dimensionally Mismatched Coulomb Coupled Graphene Systems S. M. Badalyan, A. A. Shylau, and A. P. Jauho	126801
Reentrant Phase Diagram of $\text{Yb}_2\text{Ti}_2\text{O}_7$ in a $\langle 111 \rangle$ Magnetic Field A. Scheie, J. Kindervater, S. Säubert, C. Duvinage, C. Pfeleiderer, H. J. Changlani, S. Zhang, L. Harriger, K. Arpino, S. M. Koohpayeh, O. Tchernyshyov, and C. Broholm	127201
Lattice Homotopy Constraints on Phases of Quantum Magnets Hoi Chun Po, Haruki Watanabe, Chao-Ming Jian, and Michael P. Zaletel	127202
New Boundary-Driven Twist States in Systems with Broken Spatial Inversion Symmetry Kjetil M. D. Hals and Karin Everschor-Sitte	127203
Thermal Transport in the Kitaev Model Joji Nasu, Junki Yoshitake, and Yukitoshi Motome	127204
Enhanced Second-Order Nonlinearity for THz Generation by Resonant Interaction of Exciton-Polariton Rabi Oscillations with Optical Phonons Katharina Rojan, Yoan Léger, Giovanna Morigi, Maxime Richard, and Anna Minguzzi	127401

(Continued on Preceding Page)



Selected for a Viewpoint in *Physics*. Please visit <http://physics.aps.org/>.

By suggesting a few manuscripts each week, we hope to promote reading across fields. Please see our Announcement Phys. Rev. Lett. 98, 010001 (2007)

Contents (Continued)

Terahertz Sum-Frequency Excitation of a Raman-Active Phonon	127402
Sebastian Maehrlein, Alexander Paarmann, Martin Wolf, and Tobias Kampfrath	
Magnetic Proximity Effects in Transition-Metal Dichalcogenides: Converting Excitons	127403
Benedikt Scharf, Gaofeng Xu, Alex Matos-Abiague, and Igor Žutić	
Polymer, Soft Matter, Biological, Climate, and Interdisciplinary Physics	
Scale-Dependent Stiffness and Internal Tension of a Model Brush Polymer	127801
John P. Berezney, Amanda B. Marciel, Charles M. Schroeder, and Omar A. Saleh	
Triple Junction at the Triple Point Resolved on the Individual Particle Level	128001
M. Chaudhuri, E. Allahyarov, H. Löwen, S. U. Egelhaaf, and D. A. Weitz	
 Can Hail and Rain Nucleate Cloud Droplets?	128701
Prasanth Prabhakaran, Stephan Weiss, Alexei Krekhov, Alain Pumir, and Eberhard Bodenschatz	
Errata	
Erratum: Ultimate Precision of Adaptive Noise Estimation [Phys. Rev. Lett. 118 , 100502 (2017)]	129901
Stefano Pirandola and Cosmo Lupo	
Publisher's Note: Ultimate Precision of Adaptive Noise Estimation [Phys. Rev. Lett. 118 , 100502 (2017)]	129902
Stefano Pirandola and Cosmo Lupo	



Selected for a Viewpoint in *Physics*. Please visit <http://physics.aps.org/>.

By suggesting a few manuscripts each week, we hope to promote reading across fields. Please see our Announcement Phys. Rev. Lett. 98, 010001 (2007).

Physics
spotlighting exceptional research

The American Physical Society's free online publication, *Physics* (<http://physics.aps.org/>), provides thought-provoking analysis and spotlights exceptional research.