

HIGHLIGHTED ARTICLES

Featured in Physics Editors' Suggestion

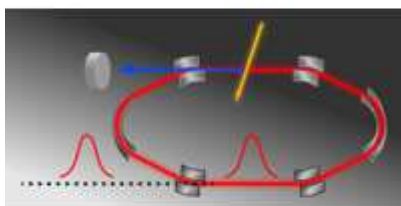
Storing keV Negative Ions for an Hour: The Lifetime of the Metastable $P_{201/2}$ level in S_{32-}

E. Bäckström, D. Hanstorp, O.M. Hole, M. Kaminska, R.F. Nascimento, M. Blom, M. Björkhage, A.

Källberg, P. Löfgren, P. Reinhed, S. Rosén, A. Simonsson, R.D. Thomas, S. Mannervik, H.T.

Schmidt, and H. Cederquist

Phys. Rev. Lett. **114**, 143003 (2015) – Published 6 April 2015



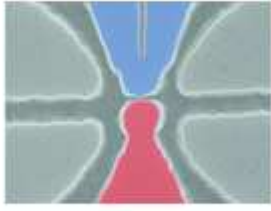
A cooled ring stores high-speed negative ions for more than 1000 seconds and enables new studies of atomic and molecular ions that are important in interstellar and atmospheric chemistry.

Featured in Physics Editors' Suggestion

Voltage Fluctuation to Current Converter with Coulomb-Coupled Quantum Dots

F. Hartmann, P. Pfeffer, S. Höfling, M. Kamp, and L. Worschech

Phys. Rev. Lett. **114**, 146805 (2015) – Published 10 April 2015



In a step toward the conversion of excess heat into electric current, researchers demonstrate a device that generates current in response to voltage fluctuations that mimic heat.

Featured in Physics

Thermocapillary Phenomena and Performance Limitations of a Wickless Heat Pipe in Microgravity

Akshay Kundan, Joel L. Plawsky, Peter C. Wayner, Jr., David F. Chao, Ronald J. Sicker, Brian J. Motil, Tibor Lorik, Louis Chestney, John Eustace, and John Zoldak
Phys. Rev. Lett. **114**, 146105 (2015) – Published 7 April 2015

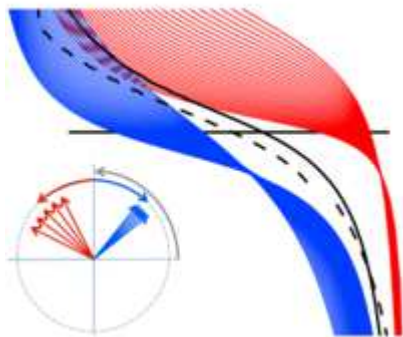


In the absence of gravity, surface tension forces affect how fluids flow in heat pipes and may limit the device's cooling performance on spacecraft missions.

Editors' Suggestion

Atom Interferometer Gyroscope with Spin-Dependent Phase Shifts Induced by Light near a Tune-Out Wavelength

Raisa Trubko, James Greenberg, Michael T. St. Germaine, Maxwell D. Gregoire, William F. Holmgren, Ivan Hromada, and Alexander D. Cronin
Phys. Rev. Lett. **114**, 140404 (2015) – Published 9 April 2015

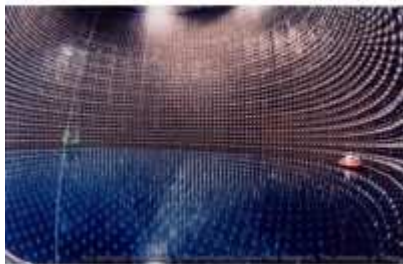


Light-induced shifts in atom interference fringes are shown to be significantly affected by the Earth's rotation rate, opening the door to a new type of atom interferometer.

Editors' Suggestion

Search for Neutrinos from Annihilation of Captured Low-Mass Dark Matter Particles in the Sun by Super-Kamiokande

K. Choi *et al.* ((Super-Kamiokande Collaboration))



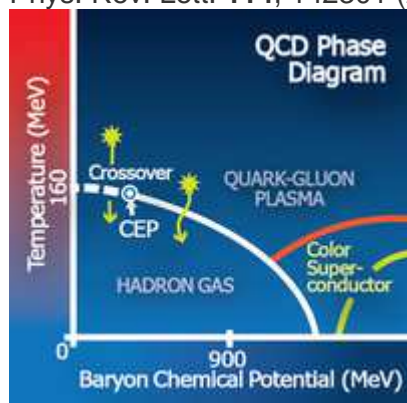
Super-Kamiokande’s 22.6 kton cylindrical water Cherenkov detector has provided the most stringent upper limit on the proton-WIMP dark matter scattering cross section.

Editors' Suggestion

Indications for a Critical End Point in the Phase Diagram for Hot and Dense Nuclear Matter

Roy A. Lacey

Phys. Rev. Lett. **114**, 142301 (2015) – Published 6 April 2015



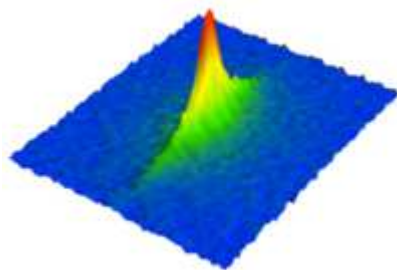
A finite size scaling analysis of heavy-ion collisions points to the location of the critical end point – the termination of the first order phase transition line – in the QCD phase diagram.

Editors' Suggestion

Matter Wave Lensing to Picokelvin Temperatures

Tim Kovachy, Jason M. Hogan, Alex Sugarbaker, Susannah M. Dickerson, Christine A. Donnelly, Chris Overstreet, and Mark A. Kasevich

Phys. Rev. Lett. **114**, 143004 (2015) – Published 8 April 2015



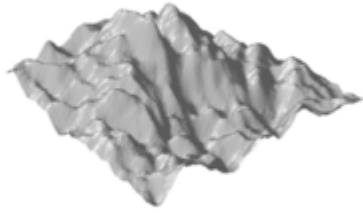
An optical dipole field is used as a collimating lens to cool Rubidium atoms to record-low kinetic temperatures of 50 picokelvin.

Editors' Suggestion

Nonlocal Resonances in Weak Turbulence of Gravity-Capillary Waves

Quentin Aubourg and Nicolas Mordant

Phys. Rev. Lett. **114**, 144501 (2015) – Published 6 April 2015

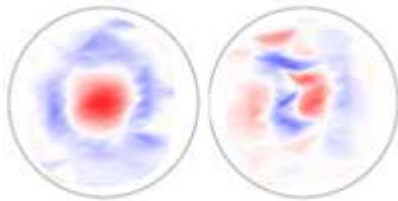


Experimental water tank measurements of gravity-capillary surface waves show 3-wave coupling is important in the build up of water wave turbulence.

Editors' Suggestion

Instability, Turbulence, and 3D Magnetic Reconnection in a Line-Tied, Zero Net Current Screw Pinch

Matthew I. Brookhart, Aaron Stemo, Amanda Zuberbier, Ellen Zweibel, and Cary B. Forest
Phys. Rev. Lett. **114**, 145001 (2015) – Published 6 April 2015



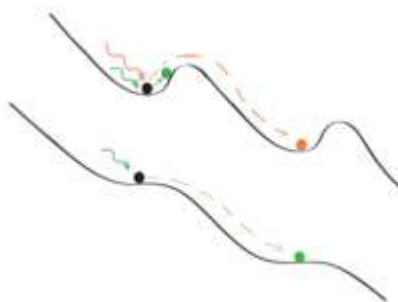
The first laboratory experiments of a zero net current plasma show instabilities and turbulence expected from solar flare and coronal heating theories.

Editors' Suggestion

From Phase Locking to Phase Slips: A Mechanism for a Quiescent H mode

Z.B. Guo and P.H. Diamond

Phys. Rev. Lett. **114**, 145002 (2015) – Published 6 April 2015



A phase dynamics approach successfully explains the nonlinear behavior of disruptive instabilities occurring at the edges of tokama plasmas.

Editors' Suggestion

Local Density of States at Metal-Semiconductor Interfaces: An Atomic Scale Study

T. Iffländer, S. Rolf-Pissarczyk, L. Winking, R.G. Ulbrich, A. Al-Zubi, S. Blügel, and M. Wenderoth
Phys. Rev. Lett. **114**, 146804 (2015) – Published 9 April 2015



The electronic charge distribution at the iron/gallium interface is imaged directly with high spatial and energetic resolution. The metal-semiconductor electronic barrier properties are found to be dependent on both the charge distribution and chemical bonds between the metal and semiconductor atoms.

LETTERS

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

Many-Body Localization in Periodically Driven Systems

Pedro Ponte, Z. Papić, François Huveneers, and Dmitry A. Abanin
Phys. Rev. Lett. **114**, 140401 (2015) – Published 7 April 2015

Monogamy Equalities for Qubit Entanglement from Lorentz Invariance

Christopher Eltschka and Jens Siewert
Phys. Rev. Lett. **114**, 140402 (2015) – Published 7 April 2015

Unifying Framework for Relaxations of the Causal Assumptions in Bell's Theorem

R. Chaves, R. Kueng, J.B. Brask, and D. Gross
Phys. Rev. Lett. **114**, 140403 (2015) – Published 7 April 2015

Editors' Suggestion

Atom Interferometer Gyroscope with Spin-Dependent Phase Shifts Induced by Light near a Tune-Out Wavelength

Raisa Trubko, James Greenberg, Michael T. St. Germaine, Maxwell D. Gregoire, William F. Holmgren, Ivan Hromada, and Alexander D. Cronin
Phys. Rev. Lett. **114**, 140404 (2015) – Published 9 April 2015

Universal Adiabatic Quantum Computation via the Space-Time Circuit-to-Hamiltonian Construction

David Gosset, Barbara M. Terhal, and Anna Vershynina
Phys. Rev. Lett. **114**, 140501 (2015) – Published 6 April 2015

Experimental Quantum-Walk Revival with a Time-Dependent Coin

P. Xue, R. Zhang, H. Qin, X. Zhan, Z.H. Bian, J. Li, and Barry C. Sanders
Phys. Rev. Lett. **114**, 140502 (2015) – Published 6 April 2015

Quantum Benchmark via an Uncertainty Product of Canonical Variables

Ryo Namiki and Koji Azuma
Phys. Rev. Lett. **114**, 140503 (2015) – Published 6 April 2015

Experimental Realization of a Quantum Support Vector Machine

Zhaokai Li, Xiaomei Liu, Nanyang Xu, and Jiangfeng Du
Phys. Rev. Lett. **114**, 140504 (2015) – Published 8 April 2015

Experimental Estimation of Average Fidelity of a Clifford Gate on a 7-Qubit Quantum Processor

Dawei Lu, Hang Li, Denis-Alexandre Trottier, Jun Li, Aharon Brodutch, Anthony P. Krismanich, Ahmad Ghavami, Gary I. Dmitrienko, Guilu Long, Jonathan Baugh, and Raymond Laflamme
Phys. Rev. Lett. **114**, 140505 (2015) – Published 8 April 2015

Identifying Local and Quasilocal Conserved Quantities in Integrable Systems

Marcin Mierzejewski, Peter Prelovšek, and Tomaž Prosen
Phys. Rev. Lett. **114**, 140601 (2015) – Published 8 April 2015

Gravitation and Astrophysics

Flip-Flopping Binary Black Holes

Carlos O. Lousto and James Healy
Phys. Rev. Lett. **114**, 141101 (2015) – Published 6 April 2015

Local Invariants Vanishing on Stationary Horizons: A Diagnostic for Locating Black Holes

Don N. Page and Andrey A. Shoom
Phys. Rev. Lett. **114**, 141102 (2015) – Published 8 April 2015

Violation of the Strong Huygen's Principle and Timelike Signals from the Early Universe

Ana Blasco, Luis J. Garay, Mercedes Martín-Benito, and Eduardo Martín-Martínez
Phys. Rev. Lett. **114**, 141103 (2015) – Published 7 April 2015

Editors' Suggestion

Search for Neutrinos from Annihilation of Captured Low-Mass Dark Matter Particles in the Sun by Super-Kamiokande

K. Choi *et al.* ((Super-Kamiokande Collaboration))
Phys. Rev. Lett. **114**, 141301 (2015) – Published 6 April 2015

Unity of Cosmological Inflation Attractors

Mario Galante, Renata Kallosh, Andrei Linde, and Diederik Roest
Phys. Rev. Lett. **114**, 141302 (2015) – Published 8 April 2015

Elementary Particles and Fields

Anomalous Solutions to the Strong CP Problem

Anson Hook
Phys. Rev. Lett. **114**, 141801 (2015) – Published 9 April 2015

Constraints on Models of the Higgs Boson with Exotic Spin and Parity using Decays to Bottom-Antibottom Quarks in the Full CDF Data Set

T. Aaltonen *et al.* ((CDF Collaboration))
Phys. Rev. Lett. **114**, 141802 (2015) – Published 10 April 2015

Measurement of Spin Correlation in Top-Antitop Quark Events and Search for Top Squark Pair Production in pp Collisions at $s\sqrt{=8}$ TeV Using the ATLAS Detector

G. Aad *et al.* ((ATLAS Collaboration))
Phys. Rev. Lett. **114**, 142001 (2015) – Published 8 April 2015

Quark Mass Relations to Four-Loop Order in Perturbative QCD

Peter Marquard, Alexander V. Smirnov, Vladimir A. Smirnov, and Matthias Steinhauser
Phys. Rev. Lett. **114**, 142002 (2015) – Published 7 April 2015

Nuclear Physics

Editors' Suggestion

Indications for a Critical End Point in the Phase Diagram for Hot and Dense Nuclear Matter

Roy A. Lacey
Phys. Rev. Lett. **114**, 142301 (2015) – Published 6 April 2015

Particle-Vibration Coupling Effect on the β Decay of Magic Nuclei

Y.F. Niu (牛一斐), Z.M. Niu (牛中明), G. Colò, and E. Vigezzi
Phys. Rev. Lett. **114**, 142501 (2015) – Published 8 April 2015

Atomic, Molecular, and Optical Physics

Streaking Temporal Double-Slit Interference by an Orthogonal Two-Color Laser Field

Martin Richter, Maksim Kunitski, Markus Schöffler, Till Jahnke, Lothar P. H. Schmidt, Min Li, Yunquan Liu, and Reinhard Dörner

Phys. Rev. Lett. **114**, 143001 (2015) – Published 6 April 2015

Beyond the Single-Atom Response in Absorption Line Shapes: Probing a Dense, Laser-Dressed Helium Gas with Attosecond Pulse Trains

Chen-Ting Liao, Arvinder Sandhu, Seth Camp, Kenneth J. Schafer, and Mette B. Gaarde

Phys. Rev. Lett. **114**, 143002 (2015) – Published 6 April 2015

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Storing keV Negative Ions for an Hour: The Lifetime of the Metastable $P_{2o1/2}$ level in S_{32}

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Phys. Rev. Lett. **114**, 143003 (2015) – Published 6 April 2015

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Phys. Rev. Lett. **114**, 143004 (2015) – Published 8 April 2015

Transient Impulsive Electronic Raman Redistribution

S. Miyabe and P. Bucksbaum

Phys. Rev. Lett. **114**, 143005 (2015) – Published 10 April 2015

High-Energy Recollision Processes of Laser-Generated Electron-Positron Pairs

Sebastian Meuren, Karen Z. Hatsagortsyan, Christoph H. Keitel, and Antonino Di Piazza

Phys. Rev. Lett. **114**, 143201 (2015) – Published 9 April 2015

Dicke Simulators with Emergent Collective Quantum Computational Abilities

Pietro Rotondo, Marco Cosentino Lagomarsino, and Giovanni Viola

Phys. Rev. Lett. **114**, 143601 (2015) – Published 6 April 2015

Strong Single-Photon Coupling in Superconducting Quantum Magnetomechanics

Guillem Via, Gerhard Kirchmair, and Oriol Romero-Isart

Phys. Rev. Lett. **114**, 143602 (2015) – Published 7 April 2015

Vacuum Rabi Spectra of a Single Quantum Emitter

Yasutomo Ota, Ryuichi Ohta, Naoto Kumagai, Satoshi Iwamoto, and Yasuhiko Arakawa

Phys. Rev. Lett. **114**, 143603 (2015) – Published 8 April 2015

Nonlinear Dynamics, Fluid Dynamics, Classical Optics, etc.

Fabrication of a Material Assembly of Silver Nanoparticles Using the Phase Gradients of Optical Tweezers

Zijie Yan, Manas Sajjan, and Norbert F. Scherer

Phys. Rev. Lett. **114**, 143901 (2015) – Published 6 April 2015

Carrier-Wave Rabi-Flopping Signatures in High-Order Harmonic Generation for Alkali Atoms

M.F. Ciappina, J.A. Pérez-Hernández, A.S. Landsman, T. Zimmermann, M. Lewenstein, L. Roso, and F. Krausz

Phys. Rev. Lett. **114**, 143902 (2015) – Published 8 April 2015

Optical Rogue Waves in Integrable Turbulence

Pierre Walczak, Stéphane Randoux, and Pierre Suret
Phys. Rev. Lett. **114**, 143903 (2015) – Published 9 April 2015

Editors' Suggestion

Nonlocal Resonances in Weak Turbulence of Gravity-Capillary Waves

Quentin Aubourg and Nicolas Mordant

Phys. Rev. Lett. **114**, 144501 (2015) – Published 6 April 2015

Nonlinear Force Propagation During Granular Impact

Abram H. Clark, Alec J. Petersen, Lou Kondic, and Robert P. Behringer

Phys. Rev. Lett. **114**, 144502 (2015) – Published 10 April 2015

Plasma and Beam Physics

Editors' Suggestion

Instability, Turbulence, and 3D Magnetic Reconnection in a Line-Tied, Zero Net Current Screw Pinch

Matthew I. Brookhart, Aaron Stemo, Amanda Zuberbier, Ellen Zweibel, and Cary B. Forest

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From Phase Locking to Phase Slips: A Mechanism for a Quiescent H mode

Z.B. Guo and P.H. Diamond

Phys. Rev. Lett. **114**, 145002 (2015) – Published 6 April 2015

Plasma Undulator Based on Laser Excitation of Wakefields in a Plasma Channel

S.G. Rykovanov, C.B. Schroeder, E. Esarey, C.G.R. Geddes, and W.P. Leemans

Phys. Rev. Lett. **114**, 145003 (2015) – Published 6 April 2015

Thin Shell, High Velocity Inertial Confinement Fusion Implosions on the National Ignition Facility

T. Ma *et al.*

Phys. Rev. Lett. **114**, 145004 (2015) – Published 6 April 2015

Three-Dimensional Drift Kinetic Response of High- β Plasmas in the DIII-D Tokamak

Z.R. Wang, M.J. Lanctot, Y.Q. Liu, J-K. Park, and J.E. Menard

Phys. Rev. Lett. **114**, 145005 (2015) – Published 7 April 2015

Condensed Matter: Structure, etc.

Quantum Critical Spin-2 Chain with Emergent SU(3) Symmetry

Pochung Chen, Zhi-Long Xue, I.P. McCulloch, Ming-Chiang Chung, Chao-Chun Huang, and S.-K.

Yip

Phys. Rev. Lett. **114**, 145301 (2015) – Published 9 April 2015

Ultracompact Interference Phonon Nanocapacitor for Storage and Lasing of Coherent Terahertz Lattice Waves

Haoxue Han, Baowen Li, Sebastian Volz, and Yuriy A. Kosevich

Phys. Rev. Lett. **114**, 145501 (2015) – Published 6 April 2015

Phonon-Induced Population Dynamics and Intersystem Crossing in Nitrogen-Vacancy Centers

M.L. Goldman, A. Sipahigil, M.W. Doherty, N.Y. Yao, S.D. Bennett, M. Markham, D.J. Twitchen,

N.B. Manson, A. Kubanek, and M.D. Lukin

Phys. Rev. Lett. **114**, 145502 (2015) – Published 8 April 2015

Force Field Analysis Suggests a Lowering of Diffusion Barriers in Atomic Manipulation Due to Presence of STM Tip

Matthias Emmrich, Maximilian Schneiderbauer, Ferdinand Huber, Alfred J. Weymouth, Norio Okabayashi, and Franz J. Giessibl

Phys. Rev. Lett. **114**, 146101 (2015) – Published 6 April 2015

Dynamics of Atomic Stick-Slip Friction Examined with Atomic Force Microscopy and Atomistic Simulations at Overlapping Speeds

Xin-Z. Liu, Zhijiang Ye, Yalin Dong, Philip Egberts, Robert W. Carpick, and Ashlie Martini
Phys. Rev. Lett. **114**, 146102 (2015) – Published 6 April 2015

Charge-Density Wave in Ca-Intercalated Bilayer Graphene Induced by Commensurate Lattice Matching

Ryota Shimizu, Katsuaki Sugawara, Kohei Kanetani, Katsuya Iwaya, Takafumi Sato, Takashi Takahashi, and Taro Hitosugi
Phys. Rev. Lett. **114**, 146103 (2015) – Published 7 April 2015

Differences Between Thermal and Laser-Induced Diffusion

Ch. Zaum, K. M. Meyer-auf-der-Heide, M. Mehlhorn, S. McDonough, W. F. Schneider, and K. Morgenstern
Phys. Rev. Lett. **114**, 146104 (2015) – Published 7 April 2015

Featured in Physics

Thermocapillary Phenomena and Performance Limitations of a Wickless Heat Pipe in Microgravity

Akshay Kundan, Joel L. Plawsky, Peter C. Wayner, Jr., David F. Chao, Ronald J. Sicker, Brian J. Motil, Tibor Lorik, Louis Chestney, John Eustace, and John Zoldak
Phys. Rev. Lett. **114**, 146105 (2015) – Published 7 April 2015

Condensed Matter: Electronic Properties, etc.

Mobility of Holstein Polaron at Finite Temperature: An Unbiased Approach

A. S. Mishchenko, N. Nagaosa, G. De Filippis, A. de Candia, and V. Cataudella
Phys. Rev. Lett. **114**, 146401 (2015) – Published 7 April 2015

Estimating Excitonic Effects in the Absorption Spectra of Solids: Problems and Insight from a Guided Iteration Scheme

Santiago Rigamonti, Silvana Botti, Valérie Veniard, Claudia Draxl, Lucia Reining, and Francesco Sottile
Phys. Rev. Lett. **114**, 146402 (2015) – Published 7 April 2015

Reemergent Superconductivity and Avoided Quantum Criticality in Cd-Doped CeIrIn₅ under Pressure

Y. Chen, W. B. Jiang, C. Y. Guo, F. Ronning, E. D. Bauer, Tuson Park, H. Q. Yuan, Z. Fisk, J. D. Thompson, and Xin Lu
Phys. Rev. Lett. **114**, 146403 (2015) – Published 9 April 2015

Band Structures of Plasmonic Polarons

Fabio Caruso, Henry Lambert, and Feliciano Giustino
Phys. Rev. Lett. **114**, 146404 (2015) – Published 9 April 2015

Nearest Neighbor Tight Binding Models with an Exact Mobility Edge in One Dimension

Sriram Ganeshan, J. H. Pixley, and S. Das Sarma
Phys. Rev. Lett. **114**, 146601 (2015) – Published 9 April 2015

Chiral Thermoelectrics with Quantum Hall Edge States

Rafael Sánchez, Björn Sothmann, and Andrew N. Jordan
Phys. Rev. Lett. **114**, 146801 (2015) – Published 7 April 2015

Experimental Verification of the Van Vleck Nature of Long-Range Ferromagnetic Order in the Vanadium-Doped Three-Dimensional Topological Insulator Sb₂Te₃

Mingda Li, Cui-Zu Chang, Lijun Wu, Jing Tao, Weiwei Zhao, Moses H. W. Chan, Jagadeesh S. Moodera, Ju Li, and Yimei Zhu
Phys. Rev. Lett. **114**, 146802 (2015) – Published 9 April 2015

Charge and Spin Transport in Edge Channels of a $\nu=0$ Quantum Hall System on the Surface of Topological Insulators

Takahiro Morimoto, Akira Furusaki, and Naoto Nagaosa
Phys. Rev. Lett. **114**, 146803 (2015) – Published 9 April 2015

Editors' Suggestion

Local Density of States at Metal-Semiconductor Interfaces: An Atomic Scale Study

T. Iffländer, S. Rolf-Pissarczyk, L. Winking, R. G. Ulbrich, A. Al-Zubi, S. Blügel, and M. Wenderoth
Phys. Rev. Lett. **114**, 146804 (2015) – Published 9 April 2015

Featured in Physics **Editors' Suggestion**

Voltage Fluctuation to Current Converter with Coulomb-Coupled Quantum Dots

F. Hartmann, P. Pfeffer, S. Höfling, M. Kamp, and L. Worschech
Phys. Rev. Lett. **114**, 146805 (2015) – Published 10 April 2015

Collapse of the Normal-State Pseudogap at a Lifshitz Transition in the $Bi_2Sr_2CaCu_2O_{8+\delta}$ Cuprate Superconductor

S. Benhabib, A. Sacuto, M. Civelli, I. Paul, M. Cazayous, Y. Gallais, M.-A. Méasson, R.D. Zhong, J. Schneeloch, G.D. Gu, D. Colson, and A. Forget
Phys. Rev. Lett. **114**, 147001 (2015) – Published 7 April 2015

Field-Orientation Dependence of Low-Energy Quasiparticle Excitations in the Heavy-Electron Superconductor UBe_{13}

Yusei Shimizu, Shunichiro Kittaka, Toshiro Sakakibara, Yoshinori Haga, Etsuji Yamamoto, Hiroshi Amitsuka, Yasumasa Tsutsumi, and Kazushige Machida
Phys. Rev. Lett. **114**, 147002 (2015) – Published 7 April 2015

Emergent Loop-Nodal s_{\pm} -Wave Superconductivity in $CeCu_2Si_2$: Similarities to the Iron-Based Superconductors

Hiroaki Ikeda, Michi-To Suzuki, and Ryotaro Arita
Phys. Rev. Lett. **114**, 147003 (2015) – Published 7 April 2015

NMR Investigation of the Quasi-One-Dimensional Superconductor $K_2Cr_3As_3$

H.Z. Zhi, T. Imai, F.L. Ning, Jin-Ke Bao, and Guang-Han Cao
Phys. Rev. Lett. **114**, 147004 (2015) – Published 9 April 2015

Scattering Continuum and Possible Fractionalized Excitations in α - $RuCl_3$

Luke J. Sandilands, Yao Tian, Kemp W. Plumb, Young-June Kim, and Kenneth S. Burch
Phys. Rev. Lett. **114**, 147201 (2015) – Published 6 April 2015

Ferromagnetism and Nonmetallic Transport of Thin-Film α - $FeSi_2$: A Stabilized Metastable Material

Guixin Cao, D.J. Singh, X.-G. Zhang, German Samolyuk, Liang Qiao, Chad Parish, Ke Jin, Yanwen Zhang, Hangwen Guo, Siwei Tang, Wenbin Wang, Jieyu Yi, Claudia Cantoni, Wolter Siemons, E. Andrew Payzant, Michael Biegalski, T.Z. Ward, David Mandrus, G.M. Stocks, and Zheng Gai
Phys. Rev. Lett. **114**, 147202 (2015) – Published 7 April 2015

Quantum versus Classical Annealing: Insights from Scaling Theory and Results for Spin Glasses on 3-Regular Graphs

Cheng-Wei Liu, Anatoli Polkovnikov, and Anders W. Sandvik
Phys. Rev. Lett. **114**, 147203 (2015) – Published 7 April 2015

Predicting a Ferrimagnetic Phase of Zn_2FeOsO_6 with Strong Magnetoelectric Coupling

P.S. Wang, W. Ren, L. Bellaiche, and H.J. Xiang
Phys. Rev. Lett. **114**, 147204 (2015) – Published 8 April 2015

All-In–All-Out Magnetic Domains: X-Ray Diffraction Imaging and Magnetic Field Control

Samuel Tardif, Soshi Takeshita, Hiroyuki Ohsumi, Jun-ichi Yamaura, Daisuke Okuyama, Zenji Hiroi, Masaki Takata, and Taka-hisa Arima

Phys. Rev. Lett. **114**, 147205 (2015) – Published 8 April 2015

Proposed Parameter-Free Model for Interpreting the Measured Positron Annihilation Spectra of Materials Using a Generalized Gradient Approximation

Bernardo Barbiellini and Jan Kuriplach

Phys. Rev. Lett. **114**, 147401 (2015) – Published 6 April 2015

Spin Precession Mapping at Ferromagnetic Resonance via Nuclear Resonant Scattering of Synchrotron Radiation

Lars Bocklage, Christian Swoboda, Kai Schlage, Hans-Christian Wille, Liudmila Dzemiantsova, Saša Bajt, Guido Meier, and Ralf Röhlsberger

Phys. Rev. Lett. **114**, 147601 (2015) – Published 6 April 2015

Electromagnetic Radiation under Explicit Symmetry Breaking

Dhiraj Sinha and Gehan A. J. Amaratunga

Phys. Rev. Lett. **114**, 147701 (2015) – Published 10 April 2015

Polymer, Soft Matter, Biological, and Interdisciplinary Physics

Why Microtubules Run in Circles: Mechanical Hysteresis of the Tubulin Lattice

Falko Ziebert, Hervé Mohrbach, and Igor M. Kulić

Phys. Rev. Lett. **114**, 148101 (2015) – Published 6 April 2015

Hyperuniform Density Fluctuations and Diverging Dynamic Correlations in Periodically Driven Colloidal Suspensions

Elsen Tjhung and Ludovic Berthier

Phys. Rev. Lett. **114**, 148301 (2015) – Published 8 April 2015

Uncertainty Loops in Travel-Time Tomography from Nonlinear Wave Physics

Erica Galetti, Andrew Curtis, Giovanni Angelo Meles, and Brian Baptie

Phys. Rev. Lett. **114**, 148501 (2015) – Published 6 April 2015

COMMENTS

Comment on “Origin of Surface Canting within Fe_3O_4 Nanoparticles”

Andreas Michels, Dirk Honecker, Sergey Erokhin, and Dmitry Berkov

Phys. Rev. Lett. **114**, 149701 (2015) – Published 7 April 2015

Krycka et al. Reply:

K.L. Krycka, J.A. Borchers, R.A. Booth, Y. Ijiri, K. Hasz, J.J. Rhyne, and S.A. Majetich

Phys. Rev. Lett. **114**, 149702 (2015) – Published 7 April 2015

ERRATA

Erratum: Counterflow Superfluidity of Two-Species Ultracold Atoms in a Commensurate Optical Lattice [Phys. Rev. Lett. 90, 100401 (2003)]

A.B. Kuklov and B.V. Svistunov

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