

Atomic positions obtained by density functional calculations overlaid on an image created by a scanning tunneling microscope of D_2O-covered step edges on Pt(553). [M. J. Kolb *et al.*, Phys. Rev. Lett **116**, 136101 (2016)]

NEWSPAPER

PHYSICAL REVIEW LETTERS

Contents

Articles published 26 March–1 April 2016

VOLUME 116, NUMBER 13 1 April 2016

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

Genuinely Multipartite Entangled Quantum States with Fully Local Hidden Variable Models and Hidden Multipartite Nonlocality 130401
Joseph Bowles, Jérémie Francfort, Mathieu Fillettaz, Flavien Hirsch, and Nicolas Brunner

Wigner Distribution of Twisted Photons 130402
Mohammad Mirhosseini, Omar S. Magaña-Loaiza, Changchen Chen, Seyed Mohammad Hashemi Rafsanjani, and Robert W. Boyd

Diagnosing Topological Edge States via Entanglement Monogamy 130501
K. Meichanetzidis, J. Eisert, M. Cirio, V. Lahtinen, and J. K. Pachos

Three-Point Functions in $c \leq 1$ Liouville Theory and Conformal Loop Ensembles 130601
Yacine Ikhlef, Jesper Lykke Jacobsen, and Hubert Saleur

Gravitation and Astrophysics

New Test of the Gravitational Inverse-Square Law at the Submillimeter Range with Dual Modulation and Compensation 131101
Wen-Hai Tan, Shan-Qing Yang, Cheng-Gang Shao, Jia Li, An-Bin Du, Bi-Fu Zhan, Qing-Lan Wang, Peng-Shun Luo, Liang-Cheng Tu, and Jun Luo

GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes 131102
B. P. Abbott *et al.* (LIGO Scientific Collaboration and Virgo Collaboration)

GW150914: The Advanced LIGO Detectors in the Era of First Discoveries 131103
B. P. Abbott *et al.* (LIGO Scientific Collaboration and Virgo Collaboration)

Elementary Particles and Fields

Quantum Electrodynamics in $d = 3$ from the ϵ Expansion 131601
Lorenzo Di Pietro, Zohar Komargodski, Itamar Shamir, and Emmanuel Stamou

New Physics Opportunities in the Boosted Di-Higgs-Boson Plus Missing Transverse Energy Signature 131801
Zhaofeng Kang, P. Ko, and Jinmian Li

Complex Path Integrals and Saddles in Two-Dimensional Gauge Theory 132001
P. V. Buividovich, Gerald V. Dunne, and S. N. Valgushev

Nuclear Physics

Measurement of the Transverse Single-Spin Asymmetry in $p^{\uparrow} + p \to W^{\pm}/Z^0$ at RHIC 132301
L. Adamczyk *et al.* (STAR Collaboration)

Anisotropic Flow of Charged Particles in Pb-Pb Collisions at $\sqrt{s_{NN}} = 5.02$ TeV 132302
J. Adam *et al.* (The ALICE Collaboration)

(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 2016 American Physical Society

0031-9007(20160401)116:13;1-I

Investigating the Pygmy Dipole Resonance Using β Decay 132501
M. Scheck, S. Mishev, V. Yu. Ponomarev, R. Chapman, L. P. Gaffney, E. T. Gregor, N. Pietralla, P. Spagnoletti, D. Savran, and G. S. Simpson

Effects of Fission Yield Data in the Calculation of Antineutrino Spectra for $^{235}\mathrm{U}(n, \mathrm{fission})$ at Thermal and Fast Neutron Energies 132502
A. A. Sonzogni, E. A. McCutchan, T. D. Johnson, and P. Dimitriou

Direct Measurement of the Astrophysical $^{38}\mathrm{K}(p,\gamma)^{39}\mathrm{Ca}$ Reaction and Its Influence on the Production of Nuclides toward the End Point of Nova Nucleosynthesis 132701
G. Lotay, G. Christian, C. Ruiz, C. Akers, D. S. Burke, W. N. Catford, A. A. Chen, D. Connolly, B. Davids, J. Fallis, U. Hager, D. A. Hutcheon, A. Mahl, A. Rojas, and X. Sun

Atomic, Molecular, and Optical Physics

Probing Molecular Dynamics by Laser-Induced Backscattering Holography 133001
Marko Haertelt, Xue-Bin Bian, Michael Spanner, André Staudte, and Paul B. Corkum

Electric Field Cancellation on Quartz by Rb Adsorbate-Induced Negative Electron Affinity 133201
J. A. Sedlacek, E. Kim, S. T. Rittenhouse, P. F. Weck, H. R. Sadeghpour, and J. P. Shaffer

Local Sampling of the Wigner Function at Telecom Wavelength with Loss-Tolerant Detection of Photon Statistics 133601
G. Harder, Ch. Silberhorn, J. Rehacek, Z. Hradil, L. Motka, B. Stoklasa, and L. L. Sánchez-Soto

Nonlinear Dynamics, Fluid Dynamics, Classical Optics, etc.

Dynamics of Localized Structures in Systems with Broken Parity Symmetry 133901
J. Javaloyes, P. Camelin, M. Marconi, and M. Giudici

Millisecond Photon Lifetime in a Slow-Light Microcavity 133902
V. Huet, A. Rasoloniaina, P. Guillemé, P. Rochard, P. Féron, M. Mortier, A. Levenson, K. Bencheikh, A. Yacomotti, and Y. Dumeige

Anomalous Edge State in a Non-Hermitian Lattice 133903
Tony E. Lee

Local Flow Field and Slip Length of Superhydrophobic Surfaces 134501
David Schäffel, Kaloian Koynov, Doris Vollmer, Hans-Jürgen Butt, and Clarissa Schönecker

Plasma and Beam Physics

Standing Helicon Wave Induced by a Rapidly Bent Magnetic Field in Plasmas 135001
Kazunori Takahashi, Sho Takayama, Atsushi Komuro, and Akira Ando

Self-Regulated Plasma Heat Flux Mitigation Due to Liquid Sn Vapor Shielding 135002
G. G. van Eden, T. W. Morgan, D. U. B. Aussems, M. A. van den Berg, K. Bystrov, and M. C. M. van de Sanden

Condensed Matter: Structure, etc.

Ultracold Nonreactive Molecules in an Optical Lattice: Connecting Chemistry to Many-Body Physics 135301
Andris Doçaj, Michael L. Wall, Rick Mukherjee, and Kaden R. A. Hazzard

One-Dimensional Liquid ^{4}He: Dynamical Properties beyond Luttinger-Liquid Theory 135302
G. Bertaina, M. Motta, M. Rossi, E. Vitali, and D. E. Galli

Superglass Phase of Interaction-Blockaded Gases on a Triangular Lattice 135303
Adriano Angelone, Fabio Mezzacapo, and Guido Pupillo

Topological Mechanics of Origami and Kirigami 135501
Bryan Gin-ge Chen, Bin Liu, Arthur A. Evans, Jayson Paulose, Itai Cohen, Vincenzo Vitelli, and C. D. Santangelo

Stress Induced Branching of Growing Crystals on Curved Surfaces 135502
Christian Köhler, Rainer Backofen, and Axel Voigt

Mechanical Weyl Modes in Topological Maxwell Lattices 135503
D. Zeb Rocklin, Bryan Gin–ge Chen, Martin Falk, Vincenzo Vitelli, and T. C. Lubensky

Mechanism of Radiation Damage Reduction in Equiatomic Multicomponent Single Phase Alloys 135504
F. Granberg, K. Nordlund, Mohammad W. Ullah, K. Jin, C. Lu, H. Bei, L. M. Wang, F. Djurabekova, W. J. Weber, and Y. Zhang

(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)

Sparse Cyclic Excitations Explain the Low Ionic Conductivity of Stoichiometric $Li_7La_3Zr_2O_{12}$ 135901
Mario Burbano, Dany Carlier, Florent Boucher, Benjamin J. Morgan, and Mathieu Salanne

Double-Stranded Water on Stepped Platinum Surfaces 136101
Manuel J. Kolb, Rachael G. Farber, Jonathan Derouin, Cansin Badan, Federico Calle-Vallejo, Ludo B. F. Juurlink, Daniel R. Killelea, and Marc T. M. Koper

Condensed Matter: Electronic Properties, etc.

Two-Magnon Raman Scattering and Pseudospin-Lattice Interactions in Sr_2IrO_4 and $Sr_3Ir_2O_7$ 136401
H. Gretarsson, N. H. Sung, M. Höppner, B. J. Kim, B. Keimer, and M. Le Tacon

Nonlocal Anomalous Hall Effect 136601
Steven S.-L. Zhang and Giovanni Vignale

Electron Phase Shift at the Zero-Bias Anomaly of Quantum Point Contacts 136801
B. Brun, F. Martins, S. Faniel, B. Hackens, A. Cavanna, C. Ulysse, A. Ouerghi, U. Gennser, D. Mailly, P. Simon, S. Huant, V. Bayot, M. Sanquer, and H. Sellier

Enhanced Thermoelectric Power in Graphene: Violation of the Mott Relation by Inelastic Scattering 136802
Fereshte Ghahari, Hong-Yi Xie, Takashi Taniguchi, Kenji Watanabe, Matthew S. Foster, and Philip Kim

Spin-Orbit Coupling at the Level of a Single Electron 136803
V. F. Maisi, A. Hofmann, M. Röösli, J. Basset, C. Reichl, W. Wegscheider, T. Ihn, and K. Ensslin

Nonlocal Polarization Feedback in a Fractional Quantum Hall Ferromagnet 136804
Szymon Hennel, Beat A. Braem, Stephan Baer, Lars Tiemann, Pirouz Sohi, Dominik Wehrli, Andrea Hofmann, Christian Reichl, Werner Wegscheider, Clemens Rössler, Thomas Ihn, Klaus Ensslin, Mark S. Rudner, and Bernd Rosenow

Unconventional Superconductivity in YPtBi and Related Topological Semimetals 137001
Markus Meinert

Irrelevance of the Boundary on the Magnetization of Metals 137201
Antimo Marrazzo and Raffaele Resta

Haldane-Hubbard Mott Insulator: From Tetrahedral Spin Crystal to Chiral Spin Liquid 137202
Ciarán Hickey, Lukasz Cincio, Zlatko Papić, and Arun Paramekanti

Resolving Nonadiabatic Dynamics of Hydrated Electrons Using Ultrafast Photoemission Anisotropy 137601
Shutaro Karashima, Yo-ichi Yamamoto, and Toshinori Suzuki

Polymer, Soft Matter, Biological, and Interdisciplinary Physics

Rigidity in Condensed Matter and Its Origin in Configurational Constraint 137801
Shibu Saw and Peter Harrowell

Dynamics of Self-Propelled Janus Particles in Viscoelastic Fluids 138301
Juan Ruben Gomez-Solano, Alex Blokhuis, and Clemens Bechinger

Hydrodynamic Boundary Effects on Thermophoresis of Confined Colloids 138302
Alois Würger

Critical Links and Nonlocal Rerouting in Complex Supply Networks 138701
Dirk Witthaut, Martin Rohden, Xiaozhu Zhang, Sarah Hallerberg, and Marc Timme

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.