



On the Cover

## HIGHLIGHTED ARTICLES

**Featured in Physics Editors' Suggestion**

### ***Prediction and Retrodiction for a Continuously Monitored Superconducting Qubit***

D. Tan, S.J. Weber, I. Siddiqi, K. Mølmer, and K.W. Murch

Phys. Rev. Lett. **114**, 090403 (2015) – Published 5 March 2015

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### ***Functional Metamirrors Using Bianisotropic Elements***

V.S. Asadchy, Y. Ra'di, J. Vehmas, and S.A. Tretyakov

Phys. Rev. Lett. **114**, 095503 (2015) – Published 6 March 2015

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### ***Three-Dimensional Reconstruction of the Giant Mimivirus Particle with an X-Ray Free-Electron Laser***

Tomas Ekeberg *et al.*

Phys. Rev. Lett. **114**, 098102 (2015) – Published 2 March 2015

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### ***Magnetic Flattening of Stem-Cell Spheroids Indicates a Size-Dependent Elastocapillary Transition***

Francois Mazuel, Myriam Reffay, Vicard Du, Jean-Claude Bacri, Jean-Paul Rieu, and Claire Wilhelm

Phys. Rev. Lett. **114**, 098105 (2015) – Published 4 March 2015

**Editors' Suggestion****Characterizing Quantum Dynamics with Initial System-Environment Correlations**

M. Ringbauer, C.J. Wood, K. Modi, A. Gilchrist, A.G. White, and A. Fedrizzi

Phys. Rev. Lett. **114**, 090402 (2015) – Published 4 March 2015

**Editors' Suggestion****Accelerating Cosmological Expansion from Shear and Bulk Viscosity**

Stefan Floerchinger, Nikolaos Tetradis, and Urs Achim Wiedemann

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Phys. Rev. Lett. **114**, 096602 (2015) – Published 4 March 2015

**Editors' Suggestion****Current-Induced Forces and Hot Spots in Biased Nanojunctions**

Jing-Tao Lü, Rasmus B. Christensen, Jian-Sheng Wang, Per Hedegård, and Mads Brandbyge

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Y. He, Y.-M. He, J. Liu, Y.-J. Wei, H.Y. Ramírez, M. Atatüre, C. Schneider, M. Kamp, S. Höfling, C.-Y. Lu, and J.-W. Pan

Phys. Rev. Lett. **114**, 097402 (2015) – Published 4 March 2015

**Editors' Suggestion****Giant Enhancement of the Optical Second-Harmonic Emission****of WSe<sub>2</sub> Monolayers by Laser Excitation at Exciton Resonances**

G. Wang, X. Marie, I. Gerber, T. Amand, D. Lagarde, L. Bouet, M. Vidal, A. Balocchi, and B. Urbaszek

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**Editors' Suggestion****Macroscopic Discontinuous Shear Thickening versus Local Shear Jamming in Cornstarch**

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Phys. Rev. Lett. **114**, 098301 (2015) – Published 3 March 2015

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**Editors' Suggestion****Characterizing Quantum Dynamics with Initial System-Environment Correlations**

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Phys. Rev. Lett. **114**, 091603 (2015) – Published 5 March 2015

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P.E. Shanahan, R. Horsley, Y. Nakamura, D. Pleiter, P.E.L. Rakow, G. Schierholz, H. Stüben,

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Phys. Rev. Lett. **114**, 091802 (2015) – Published 3 March 2015

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A. Thiel et al. (CBELSA/TAPS Collaboration)

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Phys. Rev. Lett. **114**, 092004 (2015) – Published 6 March 2015

## **$\eta_c$ Production at LHC and Implications for the Understanding of $J/\psi$ Production**

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## ***Observation of Motion-Dependent Nonlinear Dispersion with Narrow-Linewidth Atoms in an Optical Cavity***

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## ***$\gamma$ -Ray Spectra and Enhancement Factors for Positron Annihilation with Core Electrons***

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## ***Absorption-Ablation-Excitation Mechanism of Laser-Cluster Interactions in a Nanoaerosol System***

Yihua Ren, Shuiqing Li, Yiyang Zhang, Stephen D. Tse, and Marshall B. Long  
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## ***Optical Precursor with Four-Wave Mixing and Storage Based on a Cold-Atom Ensemble***

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## ***Squeezed Optomechanics with Phase-Matched Amplification and Dissipation***

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## ***Enhanced Relativistic-Electron-Beam Energy Loss in Warm Dense Aluminum***

X. Vaisseau *et al.*

Phys. Rev. Lett. **114**, 095004 (2015) – Published 4 March 2015

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Wei Chen, Adam S. Foster, Mikko J. Alava, and Lasse Laurson

Phys. Rev. Lett. **114**, 095502 (2015) – Published 5 March 2015

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V. S. Asadchy, Y. Ra'di, J. Vehmas, and S. A. Tretyakov

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Paul Syers, Dohun Kim, Michael S. Fuhrer, and Johnpierre Paglione

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Bo Lu, Keiji Yada, Masatoshi Sato, and Yukio Tanaka

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S. Lederer, Y. Schattner, E. Berg, and S.A. Kivelson

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Phys. Rev. Lett. **114**, 097002 (2015) – Published 4 March 2015

**Effects of Lifshitz Transition on Charge Transport in Magnetic Phases of Fe-Based Superconductors**

Y. Wang, Maria N. Gastiasoro, Brian M. Andersen, M. Tomić, Harald O. Jeschke, Roser Valentí, Indranil Paul, and P.J. Hirschfeld

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Felio A. Perez, Pavel Borisov, Trent A. Johnson, Tudor D. Stanescu, Robbyn Trappen, Mikel B. Holcomb, David Lederman, M.R. Fitzsimmons, Adam A. Aczel, and Tao Hong

Phys. Rev. Lett. **114**, 097201 (2015) – Published 4 March 2015

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R. Morales, Ali C. Basaran, J. E. Villegas, D. Navas, N. Soriano, B. Mora, C. Redondo, X. Batlle, and Ivan K. Schuller

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N. Magnani, R. Caciuffo, F. Wilhelm, E. Colineau, R. Eloirdi, J.-C. Griveau, J. Rusz, P.M.

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## **Momentum-Resolved Spin Dynamics of Bulk and Surface Excited States in the Topological Insulator Bi<sub>2</sub>Se<sub>3</sub>**

C. Cacho, A. Crepaldi, M. Battiato, J. Braun, F. Cilento, M. Zacchigna, M.C. Richter, O. Heckmann, E. Springate, Y. Liu, S.S. Dhesi, H. Berger, Ph. Bugnon, K. Held, M. Grioni, H. Ebert, K. Hricovini, J. Minár, and F. Parmigiani

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Phys. Rev. Lett. **114**, 097403 (2015) – Published 4 March 2015

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Semén Gorfman, Hyeokmin Choe, Vladimir V. Shvartsman, Michael Ziolkowski, Marco Vogt, Jörg Strempfer, Tadeusz Łukasiewicz, Ullrich Pietsch, and Jan Dec

Phys. Rev. Lett. **114**, 097601 (2015) – Published 3 March 2015

## **Polymer, Soft Matter, Biological, and Interdisciplinary Physics Membrane Composition Variation and Underdamped Mechanics near Transmembrane Proteins and Coats**

S. Alex Rautu, George Rowlands, and Matthew S. Turner

Phys. Rev. Lett. **114**, 098101 (2015) – Published 2 March 2015

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## **Three-Dimensional Reconstruction of the Giant Mimivirus Particle with an X-Ray Free-Electron Laser**

Tomas Ekeberg et al.

Phys. Rev. Lett. **114**, 098102 (2015) – Published 2 March 2015

## **Variational Scheme to Compute Protein Reaction Pathways Using Atomistic Force Fields with Explicit Solvent**

S. a Beccara, L. Fant, and P. Faccioli

Phys. Rev. Lett. **114**, 098103 (2015) – Published 4 March 2015

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M. Sheinman, A. Sharma, J. Alvarado, G.H. Koenderink, and F.C. MacKintosh

Phys. Rev. Lett. **114**, 098104 (2015) – Published 4 March 2015

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Phys. Rev. Lett. **114**, 098301 (2015) – Published 3 March 2015

**Active Viscoelastic Matter: From Bacterial Drag Reduction to Turbulent Solids**

E.J. Hemingway, A. Maitra, S. Banerjee, M.C. Marchetti, S. Ramaswamy, S.M. Fielding, and M.E. Cates

Phys. Rev. Lett. **114**, 098302 (2015) – Published 5 March 2015

**Impact of Single-Particle Compressibility on the Fluid-Solid Phase Transition for Ionic Microgel Suspensions**

M. Pelaez-Fernandez, Anton Souslov, L.A. Lyon, P.M. Goldbart, and A. Fernandez-Nieves

Phys. Rev. Lett. **114**, 098303 (2015) – Published 6 March 2015

## COMMENTS

**Comment on “*d+id*’ Chiral Superconductivity in Bilayer Silicene”**

Xinquan Wang and Zhigang Wu

Phys. Rev. Lett. **114**, 099701 (2015) – Published 4 March 2015

**Liu et al. Reply:**

Feng Liu, Cheng-Cheng Liu, Kehui Wu, Fan Yang, and Yugui Yao

Phys. Rev. Lett. **114**, 099702 (2015) – Published 4 March 2015

**Comment on “Superspin Glass Mediated Giant Spontaneous Exchange Bias in a Nanocomposite of BiFeO<sub>3</sub>–Bi<sub>2</sub>Fe<sub>4</sub>O<sub>9</sub>”**

A. Harres, J. Geshev, and V. Skumryev

Phys. Rev. Lett. **114**, 099703 (2015) – Published 4 March 2015

**Maity et al. reply:**

Tuhin Maity, Sudipta Goswami, Dipten Bhattacharya, and Saibal Roy

Phys. Rev. Lett. **114**, 099704 (2015) – Published 4 March 2015