PHYSICAL REVIEW LETTERS

Volume 114, Issue 5 6 February 2015

HIGHLIGHTED ARTICLES

Featured in Physics **Editors' Suggestion**

Full Multipartite Entanglement of Frequency-Comb Gaussian States

S. Gerke, J. Sperling, W. Vogel, Y. Cai, J. Roslund, N. Treps, and C. Fabre

Phys. Rev. Lett. **114**, 050501 (2015) – Published 2 February 2015

Researchers characterize the multiple ways of entanglement that exist between different frequency bands in a down-converted frequency comb.

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Glow in the Dark Matter: Observing Galactic Halos with Scattered Light

Jonathan H. Davis and Joseph Silk

Phys. Rev. Lett. **114**, 051303 (2015) – Published 4 February 2015

The dark matter around galaxies might produce a detectable glow at infrared wavelengths.

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Storage and Retrieval of THz-Bandwidth Single Photons Using a Room-Temperature Diamond Quantum Memory

Duncan G. England, Kent A. G. Fisher, Jean-Philippe W. MacLean, Philip J. Bustard, Rune Lausten, Kevin J. Resch, and Benjamin J. Sussman

Phys. Rev. Lett. **114**, 053602 (2015) – Published 5 February 2015

Diamond crystals enable new ways of storing single photons at room temperature and detecting their entanglement.

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Entangled Absorption of a Single Photon with a Single Spin in Diamond

Hideo Kosaka and Naeko Niikura

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Strange Nonchaotic Stars

John F. Lindner, Vivek Kohar, Behnam Kia, Michael Hippke, John G. Learned, and William L. Ditto

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The ratio of the frequencies of a pulsating star is approximately the golden mean, a clue that the pulsing is fractal in time.

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Sharon C. Glotzer

Phys. Rev. Lett. **114**, 050001 (2015) – Published 2 February 2015

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Convexity of the Entanglement Entropy of SU($2N$)-Symmetric Fermions with Attractive Interactions

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Phys. Rev. Lett. **114**, 050402 (2015) – Published 4 February 2015

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Lajos Diósi

Phys. Rev. Lett. **114**, 050403 (2015) – Published 4 February 2015

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Jens Braun, Joaquín E. Drut, and Dietrich Roscher

Phys. Rev. Lett. **114**, 050404 (2015) – Published 5 February 2015

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Quantum Storage of Orbital Angular Momentum Entanglement in an Atomic Ensemble

Dong-Sheng Ding, Wei Zhang, Zhi-Yuan Zhou, Shuai Shi, Guo-Yong Xiang, Xi-Shi Wang, Yun-Kun Jiang, Bao-Sen Shi, and Guang-Can Guo

Phys. Rev. Lett. **114**, 050502 (2015) – Published 4 February 2015

Efficiency Statistics at All Times: Carnot Limit at Finite Power

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Dark-Matter Decay as a Complementary Probe of Multicomponent Dark Sectors

Keith R. Dienes, Jason Kumar, Brooks Thomas, and David Yaylali

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Does Small Scale Structure Significantly Affect Cosmological Dynamics?

Julian Adamek, Chris Clarkson, Ruth Durrer, and Martin Kunz

Phys. Rev. Lett. **114**, 051302 (2015) – Published 3 February 2015

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Elementary Particles and Fields

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V. Khachatryan *et al.* (CMS Collaboration)

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Hooman Davoudiasl

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V. M. Abazov *et al.* (D0 Collaboration)

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N. Barnea, L. Contessi, D. Gazit, F. Pederiva, and U. van Kolck

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Induced Coherence, Vacuum Fields, and Complementarity in Biphoton Generation

A. Heuer, R. Menzel, and P. W. Milonni

Phys. Rev. Lett. **114**, 053601 (2015) – Published 4 February 2015

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Nonlinear Dynamics, Fluid Dynamics, Classical Optics, etc.

Mode-Locked Ultrashort Pulse Generation from On-Chip Normal Dispersion Microresonators

S.-W. Huang, H. Zhou, J. Yang, J.F. McMillan, A. Matsko, M. Yu, D.-L. Kwong, L. Maleki, and C.W. Wong

Phys. Rev. Lett. **114**, 053901 (2015) – Published 4 February 2015

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S.E. Skipetrov and I.M. Sokolov

Phys. Rev. Lett. **114**, 053902 (2015) – Published 5 February 2015

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Raktim Sarma, Li Ge, Jan Wiersig, and Hui Cao

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Origin of the Microbranching Instability in Rapid Cracks

Tamar Goldman Boué, Gil Cohen, and Jay Fineberg

Phys. Rev. Lett. **114**, 054301 (2015) – Published 2 February 2015

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R. Ganesh and S. Gonella

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D. Ratner *et al.*

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J.S. Hu, Z. Sun, H.Y. Guo, J.G. Li, B.N. Wan, H.Q. Wang, S.Y. Ding, G.S. Xu, Y.F. Liang, D.K. Mansfield, R. Maingi, X.L. Zou, L. Wang, J. Ren, G.Z. Zuo, L. Zhang, Y.M. Duan, T.H. Shi, L.Q. Hu, and East team

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Roton-Maxon Excitation Spectrum of Bose Condensates in a Shaken Optical Lattice

Li-Chung Ha, Logan W. Clark, Colin V. Parker, Brandon M. Anderson, and Cheng Chin

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Critical Length Limiting Superlow Friction

Ming Ma, Andrea Benassi, Andrea Vanossi, and Michael Urbakh

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H. D. Scammell and O. P. Sushkov

Phys. Rev. Lett. **114**, 055702 (2015) – Published 4 February 2015

Condensed Matter: Electronic Properties, etc.

Non-Gaussian Spatial Correlations Dramatically Weaken Localization

H. Javan Mard, E. C. Andrade, E. Miranda, and V. Dobrosavljević

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Real Space Imaging of Spin Polarons in Zn-Doped $SrCu_2(BO_3)_2$

M. Yoshida, H. Kobayashi, I. Yamauchi, M. Takigawa, S. Capponi, D. Poilblanc, F. Mila, K. Kudo, Y. Koike, and N. Kobayashi

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Motohiko Ezawa

Phys. Rev. Lett. **114**, 056403 (2015) – Published 5 February 2015

Disorder-Induced Floquet Topological Insulators

Paraj Titum, Netanel H. Lindner, Mikael C. Rechtsman, and Gil Refael

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Masayuki Hashisaka, Tomoaki Ota, Koji Muraki, and Toshimasa Fujisawa

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M. E. Gruner, W. Keune, B. Roldan Cuenya, C. Weis, J. Landers, S. I. Makarov, D. Klar, M. Y. Hu, E. E. Alp, J. Zhao, M. Krautz, O. Gutfleisch, and H. Wende

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Macroscopic Quantum Entanglement of a Kondo Cloud at Finite Temperature

S.-S. B. Lee, Jinhong Park, and H.-S. Sim

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Polymer, Soft Matter, Biological, and Interdisciplinary Physics

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Phys. Rev. Lett. **114**, 058101 (2015) – Published 3 February 2015

COMMENTS

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James Brown and Tucker Carrington, Jr.

Phys. Rev. Lett. **114**, 058901 (2015) – Published 5 February 2015

Comment on “Quantum Frameness for CPT Symmetry”

Piotr Kosiński

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