Optical microscope images of a colloidal capsule with an inhomogeneous shell, buckled under an external osmotic pressure; scale bar is 33 µm (top). Numerically simulated shell similar to the experimental capsule; color reflects spatially varying shell thickness (bottom). Elapsed time increases from left to right.


PHYSICAL REVIEW LETTERS

Contents

Articles published 22 September–28 September 2012

VOLUME 109, NUMBER 13 28 September 2012

General Physics: Statistical and Quantum Mechanics, Quantum Information, etc.
Reduced Equations of Motion for Quantum Systems Driven by Diffusive Markov Processes
Mohan Sarovar and Matthew D. Grace

Majorana Modes in Driven-Dissipative Atomic Superfluids with a Zero Chern Number

Two-Dimensional Fermi Liquid with Attractive Interactions
B. Fröhlich, M. Feld, E. Vogt, M. Koschorreck, M. Köhl, C. Bertl, and T. Giamarchi

Experimental Demonstration of Adaptive Quantum State Estimation
Ryo Okamoto, Minako Iefuji, Satoshi Oyama, Koschi Yamagata, Hiroshi Imai, Akio Fujiiwara, and Shigeji Takesachi

Unconditionally Secure Bit Commitment by Transmitting Measurement Outcomes
Adrian Kent

Entanglement Negativity in Quantum Field Theory
Pasquale Calabrese, John Cardy, and Erik Tonni

Reversible Optical-to-Microwave Quantum Interface
Sh. Barzanjeh, M. Abdi, G. J. Milburn, P. Tombesi, and D. Vitali

Interface Phase Transition Induced by a Driven Line in Two Dimensions
Tridib Sadhu, Zvi Shapira, and David Mukamel

Entrainment and Unit Velocity: Surprises in an Accelerated Exclusion Process
Juju Dong, Stefan Klumpp, and Royce K. Zia

Gravitation and Astrophysics
Testing MOND over a Wide Acceleration Range in X-Ray Ellipticals
Mundhia Milgrom

Black-Hole Bombs and Photon-Mass Bounds
Paolo Pani, Vitor Cardoso, Leonardo Guftieri, Emanuele Berti, and Attilio Ishibashi

Elementary Particles and Fields
Three-Point Functions of Aging Dynamics and the AdS-CFT Correspondence
Djordje Minic, Diana Vaman, and Chaolun Wu

Observation of $B^0 \rightarrow D^0 K^+$ and Evidence for $B^0_s \rightarrow D^{(*)}_0 K_{135}$
R. Aaij et al. (LHCb Collaboration)

Magnetically Amplified Tunneling of the Third Kind as a Probe of Minicharged Particles
Babette Döbrich, Holger Gies, Norman Neitz, and Felix Karbstein

Percent-Level Precision Physics at the Tevatron: Next-to-Next-to-Leading Order QCD Corrections to $\varphi \rightarrow \pi^+ \pi^-$
Peter Baird Reuther, Michal Crakow, and Alexander Mitov

(Continued Inside)