

Bayesian analysis of the QCD equation of state for dense nuclear matter. Color represents the probability for the potential energy at a given baryon density. Selected for an Editors' Suggestion. [M. Omana Kuttan *et al.*, Phys. Rev. Lett. **131**, 202303 (2023)]

NEWSPAPER

PHYSICAL REVIEW LETTERS

Contents

Articles published 11 November–17 November 2023

VOLUME 131, NUMBER 20 17 November 2023

Quantum Information, Science, and Technology

Nishimori's Cat: Stable Long-Range Entanglement from Finite-Depth Unitaries and Weak Measurements 200201
Guo-Yi Zhu, Nathanan Tantivasadakarn, Ashvin Vishwanath, Simon Trebst, and Ruben Verresen
Evolution Operator Can Always Be Separated into the Product of Holonomy and Dynamic Operators 200202
Xiao-Dong Yu and D. M. Tong
Beyond i.i.d. in the Resource Theory of Asymmetry: An Information-Spectrum Approach for Quantum Fisher Information 200203
Koji Yamaguchi and Hiroyasu Tajima
Quantum Flow Algorithms for Simulating Many-Body Systems on Quantum Computers 200601
Karol Kowalski and Nicholas P. Bauman
Non–Pauli Errors Can Be Efficiently Sampled in Qudit Surface Codes 200602
Yue Ma, Michael Hanks, and M. S. Kim
Digital Optimal Robust Control 200801
Meri Harutyunyan, Frédéric Holweck, Dominique Sugny, and Stéphane Guérin

Cosmology, Astrophysics, and Gravitation

Canonical Hubble-Tension-Resolving Early Dark Energy Cosmologies Are Inconsistent with the Lyman-α Forest 201001
Samuel Goldstein, J. Colin Hill, Vid Iršič, and Blake D. Sherwin
Recent Gravitational Wave Observation by Pulsar Timing Arrays and Primordial Black Holes: The Importance of Non-Gaussianities 201401
Gabriele Franciolini, Antonio Junior Iovino, Ville Vaskonen, and Hardi Veermäe

Particles and Fields

Search for Evidence of Baryogenesis and Dark Matter in $B^+ \to \psi_D + p$ Decays at *BABAR* 201801
J. P. Lees *et al.* (*BABAR* Collaboration)
Search for Boosted Dark Matter in COSINE-100 201802
G. Adhikari *et al.* (COSINE-100 Collaboration)

Nuclear Physics

Hyperon Polarization along the Beam Direction Relative to the Second and Third Harmonic Event Planes in Isobar Collisions at $\sqrt{s_{NN}} = 200$ GeV 202301
M. I. Abdulhamid *et al.* (STAR Collaboration)
Determination of the Neutron Skin of ^{208}Pb from Ultrarelativistic Nuclear Collisions 202302
Giuliano Giacalone, Govert Nijs, and Wilke van der Schee
QCD Equation of State of Dense Nuclear Matter from a Bayesian Analysis of Heavy-Ion Collision Data 202303
Manjunath Omana Kuttan, Jan Steinheimer, Kai Zhou, and Horst Stoecker
Deformation versus Sphericity in the Ground States of the Lightest Gold Isotopes 202501
J. G. Cubiss *et al.*

(Continued Inside)

This paper was highlighted in the APS publication *Physics* (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 2023 American Physical Society

0031-9007(20231117)131:20;1-S

Manipulation of Giant Multipole Resonances via Vortex γ Photons 202502
Zhi-Wei Lu, Liang Guo, Zheng-Zheng Li, Mamutjan Ababekri, Fang-Qi Chen, Changbo Fu, Chong Lv, Ruirui Xu, Xiangjin Kong, Yi-Fei Niu, and Jian-Xing Li

Atomic, Molecular, and Optical Physics

Auger Shake-Up Assisted Electron Recapture 203001
M. Žitnik, M. Hrast, A. Mihelič, K. Bučar, J. Turnšek, R. Püttner, G. Goldsztejn, T. Marchenko, R. Guillemin, L. Journel, O. Travnikova, I. Ismail, M. N. Piancastelli, M. Simon, D. Ceolin, and M. Kavčič

Ultrastable Super-Tonks-Girardeau Gases under Weak Dipolar Interactions 203002
Yu Chen and Xiaoling Cui

Quantum Phases from Competing Van der Waals and Dipole-Dipole Interactions of Rydberg Atoms 203003
Zeki Zeybek, Rick Mukherjee, and Peter Schmelcher

Resolving Quantum Interference Black Box through Attosecond Photoionization Spectroscopy 203201
Wenyu Jiang, Gregory S. J. Armstrong, Lulu Han, Yidan Xu, Zitan Zuo, Jihong Tong, Peifen Lu, Jan Marcus Dahlström, Kiyoshi Ueda, Andrew C. Brown, Hugo W. van der Hart, Xiaochun Gong, and Jian Wu

Trapping and Imaging Single Dysprosium Atoms in Optical Tweezer Arrays 203401
Damien Bloch, Britton Hofer, Sam R. Cohen, Antoine Browaeys, and Igor Ferrier-Barbut

Photon Pathways and the Nonperturbative Scaling Law of High Harmonic Generation 203402
Mekha Vimal, Martin Luttmann, Titouan Gadeyne, Matthieu Guer, Romain Cazali, David Bresteau, Fabien Lepetit, Olivier Tcherbakoff, Jean-François Hergott, Thierry Auguste, and Thierry Ruchon

Physics of Fluids, Earth & Planetary Science, and Climate

Saturation and Multifractality of Lagrangian and Eulerian Scaling Exponents in Three-Dimensional Turbulence 204001
Dhawal Buaria and Katepalli R. Sreenivasan

Perfect Resonant Absorption of Guided Water Waves by Autler-Townes Splitting 204002
L.-P. Euvé, K. Pham, R. Porter, P. Petitjeans, V. Pagneux, and A. Maurel

Plasma and Solar Physics, Accelerators and Beams

Anomalous Relativistic Emission from Self-Modulated Plasma Mirrors 205001
M. Lamač, K. Mima, J. Nejdl, U. Chaulagain, and S. V. Bulanov

Self-Referenced Spectral Interferometry for Single-Shot Characterization of Ultrashort Free-Electron Laser Pulses 205002
Yaozong Xiao, Hao Sun, Bo Liu, Zhentang Zhao, and Chao Feng

Condensed Matter and Materials

Resistivity Tensor of Vortex-Lattice States in Josephson Junction Arrays 206001
Alexander-Georg Penner, Karsten Flensberg, Leonid I. Glazman, and Felix von Oppen

Ab Initio Phase Diagram of Gold in Extreme Conditions 206101
P. Richard, A. Castellano, R. Béjaud, L. Baguet, J. Bouchet, G. Geneste, and F. Bottin

Superfluidity Meets the Solid State: Frictionless Mass Transport through a (5,5) Carbon Nanotube 206301
Alberto Ambrosetti, Pier Luigi Silvestrelli, and Luca Salasnich

Phonon and Magnon Jets above the Critical Current in Nanowires with Planar Domain Walls 206302
Maria Stamenova, Plamen Stamenov, and Tchavdar Todorov

Coulomb Blockade in a Nonthermalized Quantum Dot 206303
G. McArdle, R. Davies, I. V. Lerner, and I. V. Yurkevich

Correlated Electronic Structure of $La_3Ni_2O_7$ under Pressure 206501
Viktor Christiansson, Francesco Petocchi, and Philipp Werner

Observation of the Anisotropic Magneto-Thomson Effect 206701
Rajkumar Modak, Takamasa Hirai, Seiji Mitani, and Ken-ichi Uchida

Second-Order Temporal Coherence of Polariton Lasers Based on an Atomically Thin Crystal in a Microcavity 206901
Hangyong Shan, Jens-Christian Drawer, Meng Sun, Carlos Anton-Solanas, Martin Esmann, Kentaro Yumigeta, Kenji Watanabe, Takashi Taniguchi, Sefaattin Tongay, Sven Höfling, Ivan Savenko, and Christian Schneider

(Continued on Preceding Page)

This paper was highlighted in the APS publication *Physics* (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)

Distinguishing Different Stackings in Layered Materials via Luminescence Spectroscopy 206902
Matteo Zanfrognini, Alexandre Plaud, Ingrid Stenger, Frédéric Fossard, Lorenzo Sponza, Léonard Schué, Fulvio Paleari, Elisa Molinari, Daniele Varsano, Ludger Wirtz, François Ducastelle, Annick Loiseau, and Julien Barjon

Effect of Inevitable Heat Leap on the Conversion Efficiency of Thermoelectric Generators 207001
Kun Song, Shuang Wang, Yiwei Duan, Xiang Ling, and Peter Schiavone

Statistical Physics; Classical, Nonlinear, and Complex Systems

Extraordinary-log Universality of Critical Phenomena in Plane Defects 207101
Yanan Sun, Minghui Hu, Youjin Deng, and Jian-Ping Lv

Experimental Realization of Geometry-Dependent Skin Effect in a Reciprocal Two-Dimensional Lattice 207201
Wei Wang, Mengying Hu, Xulong Wang, Guancong Ma, and Kun Ding

Emergence and Control of Synchronization in Networks with Directed Many-Body Interactions 207401
Fabio Della Rossa, Davide Liuzza, Francesco Lo Iudice, and Pietro De Lellis

Polymers, Chemical Physics, Soft Matter, and Biological Physics

Polycrystallinity Enhances Stress Buildup around Ice 208201
Dominic Gerber, Lawrence A. Wilen, Eric R. Dufresne, and Robert W. Style

Scroll Waves and Filaments in Excitable Media of Higher Spatial Dimension 208401
Marie Cloet, Louise Arno, Desmond Kabus, Joeri Van der Veken, Alexander V. Panfilov, and Hans Dierckx

Selection for Size in Molecular Self-Assembly Drives the *De Novo* Evolution of a Molecular Machine 208402
Zena Hadjivasiliou and Karsten Kruse

This paper was highlighted in the APS publication *Physics* (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* (physics.aps.org), provides thought-provoking analysis and spotlights exceptional research.