PHYSICAL REVIEW D

For editorial and subscription correspondence, please see inside front cover
(ISSN: 1550-7998)

PERIODICALS

Postmaster send address changes to:

APS Subscription Services
P.O. Box 41
Annapolis Junction, MD 20701

THIRD SERIES, VOLUME 108, NUMBER 12 *CONTENTS* **D15 DECEMBER 2023**

The Table of Contents is a total listing of Parts A, B and C.
Part A consists of articles 121301–123520, Part B articles 123521–124053, and Part C articles 124054–129902(E)

PART A

LETTERS

N_{eff} in the Standard Model at NLO is 3.043 *(6 pages)* L121301
Mattia Cielo, Miguel Escudero, Gianpiero Mangano, and Ofelia Pisanti

Can Bekenstein's area law prevail in modified theories of gravity? *(7 pages)* L121501
David Kubizňák and Marek Liška

Relativistic drag forces on black holes from scalar dark matter clouds of all sizes *(9 pages)* L121502
Dina Traykova, Rodrigo Vicente, Katy Clough, Thomas Helfer, Emanuele Berti, Pedro G. Ferreira, and Lam Hui

Asymptotic freedom in $(3+1)$-dimensional projectable Hořava gravity: Connecting the ultraviolet and infrared domains *(6 pages)* L121503
Andrei O. Barvinsky, Alexander V. Kurov, and Sergey M. Sibiryakov

Novel classification method of $2+1$ spacetimes based on the Cotton scalars *(6 pages)* L121504
J. Podolský and M. Papajčík

Distinguishing Jordan and Einstein frames in gravity through entanglement *(6 pages)* L121505
Sumanta Chakraborty, Anupam Mazumdar, and Ritapriya Pradhan

Unruh effect in curved spacetime and hydrodynamics *(7 pages)* L121701
R. V. Khakimov, G. Yu. Prokhorov, O. V. Teryaev, and V. I. Zakharov

Quantum vacuum effects in nonrelativistic quantum field theory *(7 pages)* L121702
Matthew Edmonds, Antonino Flachi, and Marco Pasini

Nonsupersymmetric stable marginal deformations in $\mathrm{AdS}_3/\mathrm{CFT}_2$ *(6 pages)* L121901
Camille Eloy and Gabriel Larios

Multipoint fishnet Feynman diagrams: Sequential splitting *(7 pages)* L121902
Francesco Aprile and Enrico Olivucci

ARTICLES

Semicoherent method to search for continuous gravitational waves *(16 pages)* 122001
Sabrina D'Antonio, Cristiano Palomba, Pia Astone, Simone Dall'Osso, Stefano Dal Pra, Sergio Frasca, Paola Leaci, Federico Muciaccia, Ornella J. Piccinni, Lorenzo Pierini, and Marco Serra

Search for gravitational wave signals from known pulsars in LIGO-Virgo O3 data using the $5n$-vector ensemble method *(20 pages)* 122002
Luca D'Onofrio, Rosario De Rosa, Cristiano Palomba, Paola Leaci, Ornella J. Piccinni, Valeria Sequino, Luciano Errico, Lucia Trozzo, Jim Palfreyman, James W. McKee, Bradley W. Meyers, Ingrid Stairs, Lucas Guillemot, Ismaël Cognard, Gilles Theureau, Michael J. Keith, Andrew Lyne, Chris Flynn, and Ben Stappers

(Continued)

2470-0010(20231215)108:12*1;1-W

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. D **90**, 00001 (2014).

PHYSICAL REVIEW D THIRD SERIES, VOLUME 108, NUMBER 12 D15 DECEMBER 2023

Macroscopic dark matter detection with gravitational wave experiments *(21 pages)* 122003
Yufeng Du, Vincent S. H. Lee, Yikun Wang, and Kathryn M. Zurek

Quasiphysical model for removing short glitches from LIGO and Virgo data *(14 pages)* 122004
Ruxandra Bondarescu, Andrew Lundgren, and Ronaldas Macas

Measurement of gravitational lensing of the cosmic microwave background using SPT-3G 2018 data *(30 pages)* 122005
Z. Pan *et al.*

Nuclear physics constraints from binary neutron star mergers in the Einstein Telescope era *(17 pages)* 122006
Francesco Iacovelli, Michele Mancarella, Chiranjib Mondal, Anna Puecher, Tim Dietrich, Francesca Gulminelli, Michele Maggiore, and Micaela Oertel

LISA dynamics and control: Closed-loop simulation and numerical demonstration of time delay interferometry *(27 pages)* 122007
Lavinia Heisenberg, Henri Inchauspé, Dam Quang Nam, Orion Sauter, Ricardo Waibel, and Peter Wass

Rotating Bose-Einstein condensate stars at finite temperature *(12 pages)* 123001
P. S. Aswathi, P. S. Keerthi, O. P. Jyothilakshmi, Lakshmi J. Naik, and V. Sreekanth

Testing high scale supersymmetry via second order gravitational waves *(9 pages)* 123002
Marcos M. Flores, Alexander Kusenko, Lauren Pearce, Yuber F. Perez-Gonzalez, and Graham White

Basic characteristics of neutrino flavor conversions in the postshock regions of core-collapse supernova *(22 pages)* 123003
Hiroki Nagakura and Masamichi Zaizen

Mitigating anthropogenic and synanthropic noise in atom interferometer searches for ultralight dark matter *(16 pages)* 123004
John Carlton and Christopher McCabe

Limit setting using spacings in the presence of unknown backgrounds *(9 pages)* 123005
Lolian Shtembari and Allen Caldwell

Goodness-of-fit tests for arbitrary multivariate models *(11 pages)* 123006
Lolian Shtembari and Allen Caldwell

Posterior predictive checking for gravitational-wave detection with pulsar timing arrays. I. The optimal statistic *(12 pages)* 123007
Michele Vallisneri, Patrick M. Meyers, Katerina Chatziioannou, and Alvin J. K. Chua

Posterior predictive checking for gravitational-wave detection with pulsar timing arrays. II. Posterior predictive distributions and pseudo-Bayes factors *(18 pages)* 123008
Patrick M. Meyers, Katerina Chatziioannou, Michele Vallisneri, and Alvin J. K. Chua

Cryogenic payloads for the Einstein Telescope: Baseline design with heat extraction, suspension thermal noise modeling, and sensitivity analyses *(21 pages)* 123009
Xhesika Koroveshi, Lennard Busch, Ettore Majorana, Paola Puppo, Piero Rapagnani, Fulvio Ricci, Paolo Ruggi, and Steffen Grohmann

Equilibration of quantum many-body fast neutrino flavor oscillations *(16 pages)* 123010
Joshua D. Martin, Duff Neill, A. Roggero, Huaiyu Duan, and J. Carlson

Probing self-interacting sterile neutrino dark matter with the diffuse supernova neutrino background *(10 pages)* 123011
A. Baha Balantekin, George M. Fuller, Anupam Ray, and Anna M. Suliga

Impact of a mean field dynamo on neutron star mergers leading to magnetar remnants *(19 pages)* 123012
Elias R. Most

Background contributions in the electron-tracking Compton camera aboard SMILE-2+ *(11 pages)* 123013
Tomonori Ikeda, Atsushi Takada, Taito Takemura, Kei Yoshikawa, Yuta Nakamura, Ken Onozaka, Mitsuru Abe, Toru Tanimori, and Yoshitaka Mizumura

π-axion and π-axiverse of dark QCD *(15 pages)* 123014
Stephon Alexander, Humberto Gilmer, Tucker Manton, and Evan McDonough

Establishing connection between neutron star properties and nuclear matter parameters through a comprehensive multivariate analysis *(12 pages)* 123015
N. K. Patra, Prafulla Saxena, B. K. Agrawal, and T. K. Jha

Search technique to observe precessing compact binary mergers in the advanced detector era *(23 pages)* 123016
Connor McIsaac, Charlie Hoy, and Ian Harry

Signatures of ultralight bosons in compact binary inspiral and outspiral *(18 pages)* 123017
Yan Cao and Yong Tang

Effect of noise estimation in time-domain ringdown analysis: A case study with GW150914 *(6 pages)* 123018
Hai-Tian Wang (王海天) and Lijing Shao (邵立晶)

(Continued)

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. D **90**, 00001 (2014).

PHYSICAL REVIEW D THIRD SERIES, VOLUME 108, NUMBER 12 D15 DECEMBER 2023

Solar cycle effects in future measurements of low-energy atmospheric neutrinos *(8 pages)* 123019
Kevin J. Kelly, Pedro A. N. Machado, Nityasa Mishra, Louis E. Strigari, and Yi Zhuang

Searching for vector boson-star mergers within LIGO-Virgo intermediate-mass black-hole merger candidates *(26 pages)* 123020
Juan Calderón Bustillo, Nicolas Sanchis-Gual, Samson H. W. Leong, Koustav Chandra, Alejandro Torres-Forné, José A. Font, Carlos Herdeiro, Eugen Radu, Isaac C. F. Wong, and Tjonnie G. F. Li

Dark matter decay to neutrinos *(12 pages)* 123021
Carlos A. Argüelles, Diyaselis Delgado, Avi Friedlander, Ali Kheirandish, Ibrahim Safa, Aaron C. Vincent, and Henry White

Correction to plasmon spectrum due to dark photons in a graphene periodic structure *(6 pages)* 123022
Daqing Liu, Dong Sun, Xiuqin Hua, Xingfang Jiang, and Ning Ma

Revisiting tests of Lorentz invariance with gamma-ray bursts: Effects of intrinsic lags *(8 pages)* 123023
Valeri Vardanyan, Volodymyr Takhistov, Metin Ata, and Kohta Murase

Universality of the neutrino collisional flavor instability in core-collapse supernovae *(12 pages)* 123024
Jiabao Liu, Ryuichiro Akaho, Akira Ito, Hiroki Nagakura, Masamichi Zaizen, and Shoichi Yamada

Efficient reduced order quadrature construction algorithms for fast gravitational wave inference *(21 pages)* 123025
Gonzalo Morrás, Jose Francisco Nuño Siles, and Juan García-Bellido

Multimessenger astronomy with a Southern-hemisphere gravitational-wave observatory *(13 pages)* 123026
James W. Gardner, Ling Sun, Ssohrab Borhanian, Paul D. Lasky, Eric Thrane, David E. McClelland, and Bram J. J. Slagmolen

Glueball dark matter *(12 pages)* 123027
Pierluca Carenza, Tassia Ferreira, Roman Pasechnik, and Zhi-Wei Wang

Astrophysical neutrino oscillations after pulsar timing array analyses *(8 pages)* 123028
Gaetano Lambiase, Leonardo Mastrototaro, and Luca Visinelli

Glitch systematics on the observation of massive black-hole binaries with LISA *(17 pages)* 123029
Alice Spadaro, Riccardo Buscicchio, Daniele Vetrugno, Antoine Klein, Davide Gerosa, Stefano Vitale, Rita Dolesi, William Joseph Weber, and Monica Colpi

Axionlike dark matter model involving two-phase structure and two-particle composites *(17 pages)* 123030
A. M. Gavrilik and A. V. Nazarenko

Hybrid strangeon stars *(9 pages)* 123031
Chen Zhang, Yong Gao, Cheng-Jun Xia, and Renxin Xu

Stationary equilibrium torus supported by Weyssenhoff ideal spin fluid in Schwarzschild spacetime: Case of constant specific angular momentum distribution *(16 pages)* 123032
Sayantani Lahiri and Claus Lämmerzahl

Visualizing convolutional neural network for classifying gravitational waves from core-collapse supernovae *(13 pages)* 123033
Seiya Sasaoka, Naoki Koyama, Diego Dominguez, Yusuke Sakai, Kentaro Somiya, Yuto Omae, and Hirotaka Takahashi

Prospects for probing small-scale dark matter models with pulsars around Sagittarius A* *(13 pages)* 123034
Zexin Hu, Lijing Shao, and Fupeng Zhang

Gluon condensation: From nucleon to Galactic Center *(7 pages)* 123035
Wei Zhu, Zi-Qing Xia, Yu-Chen Tang, and Lei Feng

Visible in the laboratory and invisible in cosmology: Decaying sterile neutrinos *(10 pages)* 123036
Kevork N. Abazajian and Helena García Escudero

Ubiquity and magnitude of large FeKα equivalent widths in AGN extended regions *(9 pages)* 123037
P. Tzanavaris, T. Yaqoob, and S. LaMassa

R-process β-decay neutrino flux from binary neutron star mergers and collapsars *(14 pages)* 123038
Yu An, Meng-Ru Wu, Gang Guo, Yue-Lin Sming Tsai, Shih-Jie Huang, and Yi-Zhong Fan

GW190521: A binary black hole merger inside an active galactic nucleus? *(11 pages)* 123039
Sophia L. Morton, Stefano Rinaldi, Alejandro Torres-Orjuela, Andrea Derdzinski, M. Paola Vaccaro, and Walter Del Pozzo

(Continued)

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. D **90**, 00001 (2014).

PHYSICAL REVIEW D THIRD SERIES, VOLUME 108, NUMBER 12 D15 DECEMBER 2023

Rapid localization and inference on compact binary coalescences with the Advanced LIGO-Virgo-KAGRA gravitational-wave detector network *(19 pages)* 123040
Soichiro Morisaki, Rory Smith, Leo Tsukada, Surabhi Sachdev, Simon Stevenson, Colm Talbot, and Aaron Zimmerman

Chaotic von Zeipel-Lidov-Kozai oscillations of a binary system around a rotating supermassive black hole *(28 pages)* 123041
Kei-ichi Maeda, Priti Gupta, and Hirotada Okawa

Parameter estimation of gravitational wave with various time-delay interferometry channels *(16 pages)* 123042
Mengxu Liu and Biping Gong

Gravitational focusing effects on streaming dark matter as a new detection concept *(13 pages)* 123043
Abaz Kryemadhi, Marios Maroudas, Andreas Mastronikolis, and Konstantin Zioutas

Constraining ultralight bosons in dwarf spheroidal galaxies with a radially varying anisotropy *(11 pages)* 123044
Ivan de Martino

Piecewise frequency model for searches for long-transient gravitational waves from young neutron stars *(16 pages)* 123045
Benjamin Grace, Karl Wette, Susan M. Scott, and Ling Sun

Enhancing measurements of the CMB blackbody temperature power spectrum by removing cosmic infrared background and thermal Sunyaev-Zel'dovich contamination using external galaxy catalogs *(42 pages)* 123501
Aleksandra Kusiak, Kristen M. Surrao, and J. Colin Hill

Equilibrium thermodynamics of axion inflation *(20 pages)* 123502
Yan-Ling Wu, Li-Shuang Liu, Lin-Hong Sui, Yu-Feng Wang, Xi-Bin Li, and Narsu Bai

Lepton number survival in the cosmic neutrino background *(6 pages)* 123503
Oleg Ruchayskiy, Vsevolod Syvolap, and Robin Würsch

Sign of non-Gaussianity and the primordial black holes abundance *(6 pages)* 123504
Hassan Firouzjahi and Antonio Riotto

Observational constraints on power law Starobinsky inflation *(8 pages)* 123505
Saisandri Saini and Akhilesh Nautiyal

Relieving the S_8 tension: Exploring the surface-type DBI model as a dark matter paradigm *(8 pages)* 123506
Xingpao Suo, Xi Kang, and Huanyuan Shan

Scalar-induced gravitational waves from ghost inflation and parity violation *(20 pages)* 123507
Sebastian Garcia-Saenz, Yizhou Lu, and Zhiming Shuai

Invisible low-frequency gravitons and the audio band *(29 pages)* 123508
Massimo Giovannini

Particle production during inflation with a nonminimally coupled spectator scalar field *(12 pages)* 123509
Zhe Yu, Chengjie Fu, and Zong-Kuan Guo

Spatial curvature from super-Hubble cosmological fluctuations *(8 pages)* 123510
Baptiste Blachier, Pierre Auclair, Christophe Ringeval, and Vincent Vennin

Structure formation after reheating: Supermassive primordial black holes and Fermi ball dark matter *(10 pages)* 123511
Marcos M. Flores, Yifan Lu, and Alexander Kusenko

Amplifying quantum discord during inflationary magnetogenesis through violation of parity *(25 pages)* 123512
Sagarika Tripathy, Rathul Nath Raveendran, Krishnamohan Parattu, and L. Sriramkumar

Comparative analysis of interacting stepped dark radiation *(23 pages)* 123513
Nils Schöneberg, Guillermo Franco Abellán, Théo Simon, Alexa Bartlett, Yashvi Patel, and Tristan L. Smith

Bayesian and frequentist investigation of prior effects in EFT of LSS analyses of full-shape BOSS and eBOSS data *(20 pages)* 123514
Emil Brinch Holm, Laura Herold, Théo Simon, Elisa G. M. Ferreira, Steen Hannestad, Vivian Poulin, and Thomas Tram

Accelerated expansion of an open universe and string theory realizations *(21 pages)* 123515
David Andriot, Dimitrios Tsimpis, and Timm Wrase

Constraining postinflationary axions with pulsar timing arrays *(16 pages)* 123516
Géraldine Servant and Peera Simakachorn

(Continued)

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. D **90**, 00001 (2014).

PHYSICAL REVIEW D THIRD SERIES, VOLUME 108, NUMBER 12 D15 DECEMBER 2023

Hyper Suprime-Cam Year 3 results: Cosmology from galaxy clustering and weak lensing with HSC and SDSS using the emulator based halo model *(42 pages)* 123517
Hironao Miyatake, Sunao Sugiyama, Masahiro Takada, Takahiro Nishimichi, Xiangchong Li, Masato Shirasaki, Surhud More, Yosuke Kobayashi, Atsushi J. Nishizawa, Markus M. Rau, Tianqing Zhang, Ryuichi Takahashi, Roohi Dalal, Rachel Mandelbaum, Michael A. Strauss, Takashi Hamana, Masamune Oguri, Ken Osato, Wentao Luo, Arun Kannawadi, Bau-Ching Hsieh, Robert Armstrong, James Bosch, Yutaka Komiyama, Robert H. Lupton, Nate B. Lust, Lauren A. MacArthur, Satoshi Miyazaki, Hitoshi Murayama, Yuki Okura, Paul A. Price, Tomomi Sunayama, Philip J. Tait, Masayuki Tanaka, and Shiang-Yu Wang

Hyper Suprime-Cam Year 3 results: Cosmology from cosmic shear two-point correlation functions *(39 pages)* 123518
Xiangchong Li, Tianqing Zhang, Sunao Sugiyama, Roohi Dalal, Ryo Terasawa, Markus M. Rau, Rachel Mandelbaum, Masahiro Takada, Surhud More, Michael A. Strauss, Hironao Miyatake, Masato Shirasaki, Takashi Hamana, Masamune Oguri, Wentao Luo, Atsushi J. Nishizawa, Ryuichi Takahashi, Andrina Nicola, Ken Osato, Arun Kannawadi, Tomomi Sunayama, Robert Armstrong, James Bosch, Yutaka Komiyama, Robert H. Lupton, Nate B. Lust, Lauren A. MacArthur, Satoshi Miyazaki, Hitoshi Murayama, Takahiro Nishimichi, Yuki Okura, Paul A. Price, Philip J. Tait, Masayuki Tanaka, and Shiang-Yu Wang

Hyper Suprime-Cam Year 3 results: Cosmology from cosmic shear power spectra *(37 pages)* 123519
Roohi Dalal, Xiangchong Li, Andrina Nicola, Joe Zuntz, Michael A. Strauss, Sunao Sugiyama, Tianqing Zhang, Markus M. Rau, Rachel Mandelbaum, Masahiro Takada, Surhud More, Hironao Miyatake, Arun Kannawadi, Masato Shirasaki, Takanori Taniguchi, Ryuichi Takahashi, Ken Osato, Takashi Hamana, Masamune Oguri, Atsushi J. Nishizawa, Andrés A. Plazas Malagón, Tomomi Sunayama, David Alonso, Anže Slosar, Wentao Luo, Robert Armstrong, James Bosch, Bau-Ching Hsieh, Yutaka Komiyama, Robert H. Lupton, Nate B. Lust, Lauren A. MacArthur, Satoshi Miyazaki, Hitoshi Murayama, Takahiro Nishimichi, Yuki Okura, Paul A. Price, Philip J. Tait, Masayuki Tanaka, and Shiang-Yu Wang

Hyper Suprime-Cam Year 3 results: Measurements of clustering of SDSS-BOSS galaxies, galaxy-galaxy lensing, and cosmic shear *(32 pages)* 123520
Surhud More, Sunao Sugiyama, Hironao Miyatake, Markus Michael Rau, Masato Shirasaki, Xiangchong Li, Atsushi J. Nishizawa, Ken Osato, Tianqing Zhang, Masahiro Takada, Takashi Hamana, Ryuichi Takahashi, Roohi Dalal, Rachel Mandelbaum, Michael A. Strauss, Yosuke Kobayashi, Takahiro Nishimichi, Masamune Oguri, Wentao Luo, Arun Kannawadi, Bau-Ching Hsieh, Robert Armstrong, James Bosch, Yutaka Komiyama, Robert H. Lupton, Nate B. Lust, Lauren A. MacArthur, Satoshi Miyazaki, Hitoshi Murayama, Yuki Okura, Paul A. Price, Philip J. Tait, Masayuki Tanaka, and Shiang-Yu Wang

PART B

Hyper Suprime-Cam Year 3 results: Cosmology from galaxy clustering and weak lensing with HSC and SDSS using the minimal bias model *(31 pages)* 123521
Sunao Sugiyama, Hironao Miyatake, Surhud More, Xiangchong Li, Masato Shirasaki, Masahiro Takada, Yosuke Kobayashi, Ryuichi Takahashi, Takahiro Nishimichi, Atsushi J. Nishizawa, Markus M. Rau, Tianqing Zhang, Roohi Dalal, Rachel Mandelbaum, Michael A. Strauss, Takashi Hamana, Masamune Oguri, Ken Osato, Arun Kannawadi, Bau-Ching Hsieh, Wentao Luo, Robert Armstrong, James Bosch, Yutaka Komiyama, Robert H. Lupton, Nate B. Lust, Satoshi Miyazaki, Hitoshi Murayama, Yuki Okura, Paul A. Price, Philip J. Tait, Masayuki Tanaka, and Shiang-Yu Wang

Matter-antimatter origin of cosmic magnetism *(14 pages)* 123522
Andrew Steinmetz, Cheng Tao Yang, and Johann Rafelski

Parity violation from emergent nonlocality during inflation *(15 pages)* 123523
Sadra Jazayeri, Sébastien Renaux-Petel, Xi Tong, Denis Werth, and Yuhang Zhu

Starobinsky inflation with a quadratic Weyl tensor *(21 pages)* 123524
Antonio De Felice, Ryodai Kawaguchi, Kotaro Mizui, and Shinji Tsujikawa

Weaker gravity and thermal relic abundance *(8 pages)* 123525
Hooman Davoudiasl and Matthew Sullivan

Cosmological constraints from the Subaru Hyper Suprime-Cam year 1 shear catalogue lensing convergence probability distribution function *(9 pages)* 123526
Leander Thiele, Gabriela A. Marques, Jia Liu, and Masato Shirasaki

(Continued)

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. D **90**, 00001 (2014).

PHYSICAL REVIEW D **THIRD SERIES, VOLUME 108, NUMBER 12** **D15 DECEMBER 2023**

Practical approaches to analyzing PTA data: Cosmic strings with six pulsars *(14 pages)* 123527
Hippolyte Quelquejay Leclere *et al.* (European Pulsar Timing Array)

Constraining cosmological vorticity modes with CMB secondary anisotropies *(7 pages)* 123528
William R. Coulton, Kazuyuki Akitsu, and Masahiro Takada

NANOGrav spectral index $\gamma = 3$ from melting domain walls *(7 pages)* 123529
E. Babichev, D. Gorbunov, S. Ramazanov, R. Samanta, and A. Vikman

Quantum thermodynamics of de Sitter space *(13 pages)* 123530
Robert Alicki, Gabriela Barenboim, and Alejandro Jenkins

Frequency modulation of gravitational waves by ultralight scalar dark matter *(6 pages)* 123531
Ke Wang and Yin Zhong

Ultralow mass primordial black holes in the early Universe can explain the pulsar timing array signal *(8 pages)* 123532
Nilanjandev Bhaumik, Rajeev Kumar Jain, and Marek Lewicki

Anisotropic distance ladder in Pantheon+supernovae *(7 pages)* 123533
Ruairí Mc Conville and Eoin Ó Colgáin

Novel integrated Sachs-Wolfe effect from early dark energy *(12 pages)* 123534
Tristan L. Smith, John T. Giblin, Mustafa Amin, Mary Gerhardinger, Ericka Florio, Matthew Cerep, and Shar Daniels

Precision of localization of single gravitational-wave source with pulsar timing array *(11 pages)* 123535
Ryo Kato and Keitaro Takahashi

Radio-frequency WIMP search with the MeerKAT galaxy cluster legacy survey *(23 pages)* 123536
Natasha Lavis, Michael Sarkis, Geoff Beck, and Kenda Knowles

Stochastic multiple fields inflation: Diffusion dominated regime *(23 pages)* 123537
Kosar Asadi, Amin Nassiri-Rad, and Hassan Firouzjahi

Induced gravitational waves with kination era for recent pulsar timing array signals *(12 pages)* 123538
Keisuke Harigaya, Keisuke Inomata, and Takahiro Terada

Gravitational wave resonance in ultralight dark matter halos *(7 pages)* 123539
Paola C. M. Delgado

Repeated gravitational wave bursts from cosmic strings *(6 pages)* 123540
Pierre Auclair, Danièle A. Steer, and Tanmay Vachaspati

Perturbation theory challenge for cosmological parameters estimation. II. Matter power spectrum in redshift space *(30 pages)* 123541
Ken Osato, Takahiro Nishimichi, Atsushi Taruya, and Francis Bernardeau

Impact of the primordial fluctuation power spectrum on the reionization history *(10 pages)* 123542
Teppei Minoda, Shintaro Yoshiura, and Tomo Takahashi

Probing wave-optics effects and low-mass dark matter halos with lensing of gravitational waves from massive black holes *(23 pages)* 123543
Mesut Çalışkan, Neha Anil Kumar, Lingyuan Ji, Jose M. Ezquiaga, Roberto Cotesta, Emanuele Berti, and Marc Kamionkowski

Distinguishing the nanohertz gravitational-wave sources by the observations of compact dark matter subhalos *(7 pages)* 123544
Jing Liu

New inflation in the waterfall region *(16 pages)* 123545
Niamat Ullah Khan, Nadir Ijaz, and Mansoor Ur Rehman

Cosmological constraints on thermal friction of axion dark matter *(12 pages)* 123546
Gang Liu, Yuhao Mu, Zhihuan Zhou, and Lixin Xu

Nonparametric maximum likelihood component separation for CMB polarization data *(21 pages)* 123547
Clément Leloup, Josquin Errard, and Radek Stompor

Photon escape cones, physical and optical metrics, asymptotic and near-horizon physics *(15 pages)* 124001
Joshua Baines and Matt Visser

Global Kruskal-Szekeres coordinates for Reissner-Nordström spacetime *(10 pages)* 124002
Farshid Soltani

Constraints on massive gravity from dipolar mode excitations *(11 pages)* 124003
Vitor Cardoso, Francisco Duque, Andrea Maselli, and David Pereñiguez

(Continued)

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. D **90**, 00001 (2014).

PHYSICAL REVIEW D THIRD SERIES, VOLUME 108, NUMBER 12 D15 DECEMBER 2023

Static and spherically symmetric black holes in gravity with a background Kalb-Ramond field *(11 pages)* 124004
Ke Yang, Yue-Zhe Chen, Zheng-Qiao Duan, and Ju-Ying Zhao

Local symmetries as constraints on the motion of freely falling extended bodies *(27 pages)* 124005
Abraham I. Harte and David Dwyer

Model-independent search for the quasinormal modes of gravitational wave echoes *(31 pages)* 124006
Di Wu, Pengyuan Gao, Jing Ren, and Niayesh Afshordi

Kinematic and energy properties of dynamical regular black holes *(14 pages)* 124007
Sebastian Murk and Ioannis Soranidis

Testing the braneworld theory with identical particles *(8 pages)* 124008
Ivana Stojiljković, Dušan Đorđević, Aleksandra Gočanin, and Dragoljub Gočanin

Electromagnetic antennas for the resonant detection of the stochastic gravitational wave background *(10 pages)* 124009
Nicolas Herman, Léonard Lehoucq, and André Fűzfa

Conservative binary dynamics from gravitational tail emission processes *(13 pages)* 124010
Gabriel Luz Almeida, Alan Müller, Stefano Foffa, and Riccardo Sturani

Equivalence between definitions of the gravitational deflection angle of light for a stationary spacetime *(4 pages)* 124011
Kaisei Takahashi, Ryuya Kudo, Keita Takizawa, and Hideki Asada

Thermodynamics of charged black hole with scalar hair *(7 pages)* 124012
M. Blagojević and B. Cvetković

Diffeomorphism-invariant action principles for trace-free Einstein gravity *(5 pages)* 124013
Merced Montesinos and Diego Gonzalez

Eccentricity-tide coupling: Impact on binary neutron stars and extreme mass ratio inspirals *(12 pages)* 124014
John Paul Bernaldez and Sayak Datta

Generic initial data for binary boson stars *(23 pages)* 124015
Nils Siemonsen and William E. East

Strong-field scattering of two spinning black holes: Numerical relativity versus post-Minkowskian gravity *(23 pages)* 124016
Piero Rettegno, Geraint Pratten, Lucy M. Thomas, Patricia Schmidt, and Thibault Damour

Does the speed of gravitational waves depend on the source velocity? *(9 pages)* 124017
Rajes Ghosh, Sreejith Nair, Lalit Pathak, Sudipta Sarkar, and Anand S. Sengupta

Analytic systematics in next generation of effective-one-body gravitational waveform models for future observations *(28 pages)* 124018
Alessandro Nagar, Piero Rettegno, Rossella Gamba, Simone Albanesi, Angelica Albertini, and Sebastiano Bernuzzi

Gravitational lensing of massive particles in the charged NUT spacetime *(52 pages)* 124019
Torben C. Frost

Tachyonic media in analog models of special relativity *(13 pages)* 124020
Sundance O. Bilson-Thompson, Scott L. Todd, James Read, Valentina Baccetti, and Nicolas C. Menicucci

Formulation improvements for critical collapse simulations *(20 pages)* 124021
Daniela Cors, Sarah Renkhoff, Hannes R. Rüter, David Hilditch, and Bernd Brügmann

Accretion of the relativistic Vlasov gas onto a Kerr black hole *(13 pages)* 124022
Ping Li, Yong-qiang Liu, and Xiang-hua Zhai

Quasinormal modes of tensor perturbations of Kaluza-Klein black holes in Einstein-Gauss-Bonnet gravity *(26 pages)* 124023
Li-Ming Cao, Liang-Bi Wu, Yaqi Zhao, and Yu-Sen Zhou

Holonomy corrected Schwarzschild black hole lensing *(9 pages)* 124024
A. R. Soares, C. F. S. Pereira, R. L. L. Vitória, and Erick Melo Rocha

Accelerating and charged type I black holes *(24 pages)* 124025
Marco Astorino

Compact binary systems in Einstein-Æther gravity: Direct integration of the relaxed field equations to 2.5 post-Newtonian order *(19 pages)* 124026
Fatemeh Taherasghari and Clifford M. Will

Effect of environment in the timing of a pulsar orbiting SgrA* *(16 pages)* 124027
Amodio Carleo and Bilel Ben-Salem

(Continued)

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. D **90**, 00001 (2014).

PHYSICAL REVIEW D **THIRD SERIES, VOLUME 108, NUMBER 12** **D15 DECEMBER 2023**

Nonequatorial scalar clouds supported by maximally spinning Kerr black holes *(6 pages)* 124028
Shahar Hod

Note on Harada's conformal Killing gravity *(5 pages)* 124029
Carlo Alberto Mantica and Luca Guido Molinari

Nonpropagating ghost in covariant $f(Q)$ gravity *(11 pages)* 124030
Kun Hu, Makishi Yamakoshi, Taishi Katsuragawa, Shin'ichi Nojiri, and Taotao Qiu

Properties of quasilocal mass in binary black hole mergers *(17 pages)* 124031
Daniel Pook-Kolb, Bowen Zhao, Lars Andersson, Badri Krishnan, and Shing-Tung Yau

Quasinormal modes of rotating black holes in higher-derivative gravity *(11 pages)* 124032
Pablo A. Cano, Kwinten Fransen, Thomas Hertog, and Simon Maenaut

Superradiant instability spectrum of the hydrodynamic vortex model *(7 pages)* 124033
Shahar Hod

Numerical analysis of quasiperiodic oscillations with spherical spacetimes *(13 pages)* 124034
Kuantay Boshkayev, Orlando Luongo, and Marco Muccino

Laying the foundation of the effective-one-body waveform models `SEOBNRv5`: Improved accuracy and efficiency for spinning nonprecessing binary black holes *(58 pages)* 124035
Lorenzo Pompili, Alessandra Buonanno, Héctor Estellés, Mohammed Khalil, Maarten van de Meent, Deyan P. Mihaylov, Serguei Ossokine, Michael Pürrer, Antoni Ramos-Buades, Ajit Kumar Mehta, Roberto Cotesta, Sylvain Marsat, Michael Boyle, Lawrence E. Kidder, Harald P. Pfeiffer, Mark A. Scheel, Hannes R. Rüter, Nils Vu, Reetika Dudi, Sizheng Ma, Keefe Mitman, Denyz Melchor, Sierra Thomas, and Jennifer Sanchez

Theoretical groundwork supporting the precessing-spin two-body dynamics of the effective-one-body waveform models `SEOBNRv5` *(36 pages)* 124036
Mohammed Khalil, Alessandra Buonanno, Héctor Estellés, Deyan P. Mihaylov, Serguei Ossokine, Lorenzo Pompili, and Antoni Ramos-Buades

Next generation of accurate and efficient multipolar precessing-spin effective-one-body waveforms for binary black holes *(34 pages)* 124037
Antoni Ramos-Buades, Alessandra Buonanno, Héctor Estellés, Mohammed Khalil, Deyan P. Mihaylov, Serguei Ossokine, Lorenzo Pompili, and Mahlet Shiferaw

Enhancing the `SEOBNRv5` effective-one-body waveform model with second-order gravitational self-force fluxes *(22 pages)* 124038
Maarten van de Meent, Alessandra Buonanno, Deyan P. Mihaylov, Serguei Ossokine, Lorenzo Pompili, Niels Warburton, Adam Pound, Barry Wardell, Leanne Durkan, and Jeremy Miller

Closed-form solutions of spinning, eccentric binary black holes at 1.5 post-Newtonian order *(14 pages)* 124039
Rickmoy Samanta, Sashwat Tanay, and Leo C. Stein

Effect of dynamical gravitomagnetic tides on measurability of tidal parameters for binary neutron stars using gravitational waves *(21 pages)* 124040
Pawan Kumar Gupta, Jan Steinhoff, and Tanja Hinderer

Black string spectrum of shift-symmetric Horndeski theories *(12 pages)* 124041
Luis Guajardo

Extension of the Bayesian searches for anisotropic stochastic gravitational-wave background with nontensorial polarizations *(20 pages)* 124042
Leo Tsukada

General relativistic magnetohydrodynamic simulations of accretion disks around tilted binary black holes of unequal mass *(17 pages)* 124043
Milton Ruiz, Antonios Tsokaros, and Stuart L. Shapiro

Enhanced plateau effect at resonance in realistic nonintegrable extreme-mass-ratio inspirals *(13 pages)* 124044
Areti Eleni and Theocharis A. Apostolatos

Precision tracking of massive black hole spin evolution with LISA *(19 pages)* 124045
Geraint Pratten, Patricia Schmidt, Hannah Middleton, and Alberto Vecchio

Approximate relation between black hole perturbation theory and numerical relativity *(14 pages)* 124046
Tousif Islam and Gaurav Khanna

(Continued)

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. D **90**, 00001 (2014).

PHYSICAL REVIEW D **THIRD SERIES, VOLUME 108, NUMBER 12** **D15 DECEMBER 2023**

Subtraction of the confusion foreground and parameter uncertainty of resolvable galactic binaries on the networks of space-based gravitational-wave detectors *(13 pages)* 124047
Jie Wu (吴洁) and Jin Li (李瑾)

Instability and backreaction of massive spin-2 fields around black holes *(10 pages)* 124048
William E. East and Nils Siemonsen

Wormhole solution free of ghosts in Einstein's gravity with two scalar fields *(10 pages)* 124049
Shin'ichi Nojiri and G. G. L. Nashed

Hubble tension and fifth forces *(15 pages)* 124050
Marcus Högås and Edvard Mörtsell

Carrollian limit of quadratic gravity *(13 pages)* 124051
Poula Tadros and Ivan Kolář

Comparing one-loop gravitational bremsstrahlung amplitudes to the multipolar-post-Minkowskian waveform *(27 pages)* 124052
Donato Bini, Thibault Damour, and Andrea Geralico

Inverse problem of analog gravity systems *(11 pages)* 124053
Saulo Albuquerque, Sebastian H. Völkel, Kostas D. Kokkotas, and Valdir B. Bezerra

PART C

Optical appearance of a nonsingular de Sitter core black hole geometry under several thin disk emissions *(12 pages)* 124054
I. De Martino, R. Della Monica, and D. Rubiera-Garcia

Spin-eccentricity interplay in merging binary black holes *(11 pages)* 124055
Giulia Fumagalli and Davide Gerosa

Rapidly rotating neutron stars: Universal relations and EOS inference *(17 pages)* 124056
Christian J. Krüger and Sebastian H. Völkel

Monte Carlo methods for stationary solutions of general-relativistic Vlasov systems: Collisionless accretion onto black holes *(21 pages)* 124057
Patryk Mach, Adam Cieślik, and Andrzej Odrzywołek

Local scale symmetry in non-riemannian geometry based gravitational theories and the role of the noether current *(16 pages)* 124058
R. Gonzalez Quaglia and Israel Quiros

Uniform sky glow observed through the throat of a wormhole *(8 pages)* 124059
M. A. Bugaev, P. S. Samorodskaya, I. D. Novikov, and S. V. Repin

Fortifying gravitational-wave tests of general relativity against astrophysical assumptions *(19 pages)* 124060
Ethan Payne, Maximiliano Isi, Katerina Chatziioannou, and Will M. Farr

Searching for massive black hole binaries with a transfer learning algorithm *(21 pages)* 124061
Kritti Sharma, Koustav Chandra, and Archana Pai

Secondary accretion of dark matter in intermediate mass-ratio inspirals: Dark-matter dynamics and gravitational-wave phase *(24 pages)* 124062
David A. Nichols, Benjamin A. Wade, and Alexander M. Grant

Bayesian inference of binary black holes with inspiral-merger-ringdown waveforms using two eccentric parameters *(29 pages)* 124063
Antoni Ramos-Buades, Alessandra Buonanno, and Jonathan Gair

Constructing maximal extensions of the Vaidya metric in Israel coordinates: Integration of the field equations *(9 pages)* 124064
Sheref Nasereldin and Kayll Lake

Are nonrelativistic ground state ℓ-boson stars only stable for $\ell = 0$ and $\ell = 1$? *(22 pages)* 124065
Emmanuel Chávez Nambo, Armando A. Roque, and Olivier Sarbach

Gravitational collapse in quadratic gravity *(14 pages)* 124066
Ramiro Cayuso

Coupling metric-affine gravity to the standard model and dark matter fermions *(29 pages)* 124067
Claire Rigouzzo and Sebastian Zell

Effects of mass and self-interaction on nonlinear scalarization of scalar-Gauss-Bonnet black holes *(13 pages)* 124068
Alexandre M. Pombo and Daniela D. Doneva

(Continued)

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. D **90**, 00001 (2014).

PHYSICAL REVIEW D **THIRD SERIES, VOLUME 108, NUMBER 12** **D15 DECEMBER 2023**

Low frequency gravitational waves through Berry phase *(12 pages)* 124069
Partha Nandi, Sounak Pal, Sayan Kumar Pal, and Bibhas Ranjan Majhi

Reference metric approach to the Z4 system *(19 pages)* 124070
Gray D. Reid and Matthew W. Choptuik

Energy transfer in the collision of two scalar wave packets in spherical symmetry *(8 pages)* 124071
Li-Jie Xin, Jun-Qi Guo, and Cheng-Gang Shao

Causality of photon propagation under dominant energy condition in nonlinear electrodynamics *(8 pages)* 124072
Shinya Tomizawa and Ryotaku Suzuki

Tidal properties of neutron stars in scalar-tensor theories of gravity *(43 pages)* 124073
Gastón Creci, Tanja Hinderer, and Jan Steinhoff

Conformally invariant Brans-Dicke loop quantum cosmology: A quantum geometric model of linking theory *(19 pages)* 124074
Chun-Yen Lin, Xiangjing Liu, Yongge Ma, and Cong Zhang

Aspects of higher-curvature gravities with covariant derivatives *(29 pages)* 124075
Sergio E. Aguilar-Gutierrez, Pablo Bueno, Pablo A. Cano, Robie A. Hennigar, and Quim Llorens

Well-posed nonvacuum solutions in Robinson-Trautman geometry *(12 pages)* 124076
T. Tahamtan, D. Flores-Alfonso, and O. Svítek

Black holes with scalar hair: Extending from and beyond the Schwarzschild solution *(7 pages)* 124077
Xi-Jing Wang, Guoyang Fu, Peng Liu, Xiao-Mei Kuang, Bin Wang, and Jian-Pin Wu

Field response in the near-horizon limit of near-extremal five-dimensional black holes *(14 pages)* 124078
Gaston Giribet, Juan Laurnagaray, Bryan Malpartida, Julio Oliva, and Osvaldo Santillán

Detectability of dense-environment effects on black-hole mergers: The scalar field case, higher-order ringdown modes, and parameter biases *(16 pages)* 124079
Samson H. W. Leong, Juan Calderón Bustillo, Miguel Gracia-Linares, and Pablo Laguna

Quasiequilibrium configurations of binary systems of dark matter admixed neutron stars *(16 pages)* 124080
Hannes R. Rüter, Violetta Sagun, Wolfgang Tichy, and Tim Dietrich

Generalized optimal statistic for characterizing multiple correlated signals in pulsar timing arrays *(11 pages)* 124081
Shashwat C. Sardesai, Sarah J. Vigeland, Kyle A. Gersbach, and Stephen R. Taylor

Adiabatic regularization for spin-1 fields *(11 pages)* 125001
F. Javier Marañón-González and José Navarro-Salas

Solving anharmonic oscillator with null states: Hamiltonian bootstrap and Dyson-Schwinger equations *(35 pages)* 125002
Yongwei Guo and Wenliang Li

Stress-energy tensor correlations across regular black holes horizons *(18 pages)* 125003
Matteo Fontana and Massimiliano Rinaldi

Renormalized stress-energy tensor for scalar fields in Hartle-Hawking, Boulware, and Unruh states in the Reissner-Nordström spacetime *(18 pages)* 125004
Julio Arrechea, Cormac Breen, Adrian Ottewill, and Peter Taylor

Remarks on boundaries, anomalies, and noninvertible symmetries *(41 pages)* 125005
Yichul Choi, Brandon C. Rayhaun, Yaman Sanghavi, and Shu-Heng Shao

Hamiltonian renormalization. VI. Parametrized field theory on the cylinder *(34 pages)* 125006
T. Thiemann and E.-A. Zwicknagel

Hamiltonian renormalization. VII. Free fermions and doubler free kernels *(13 pages)* 125007
T. Thiemann

Renormalization, wavelets, and the Dirichlet-Shannon kernels *(16 pages)* 125008
T. Thiemann

Reflected entropy and Markov gap in noninertial frames *(15 pages)* 125009
Jaydeep Kumar Basak, Dimitrios Giataganas, Sayid Mondal, and Wen-Yu Wen

Debye screening of non-Abelian plasmas in curved spacetimes *(14 pages)* 125010
Elba Alonso-Monsalve and David I. Kaiser

Dual properties of dense quark matter with color superconductivity phenomenon *(13 pages)* 125011
T. G. Khunjua, K. G. Klimenko, and R. N. Zhokhov

Hybrid quantum states in 2D dilaton gravity *(29 pages)* 125012
Yohan Potaux, Debajyoti Sarkar, and Sergey N. Solodukhin

(Continued)

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. D **90**, 00001 (2014).

PHYSICAL REVIEW D **THIRD SERIES, VOLUME 108, NUMBER 12** **D15 DECEMBER 2023**

Evolution of capacity of entanglement and modular entropy in harmonic chains and scalar fields *(19 pages)* 125013
K. Andrzejewski

Super-Carrollian and super-Galilean field theories *(22 pages)* 125014
Konstantinos Koutrolikos and Mojtaba Najafizadeh

Hawking radiation for detectors in superposition of locations outside a black hole *(14 pages)* 125015
Jerzy Paczos and Luis C. Barbado

Entanglement Rényi entropy and boson-fermion duality in the massless Thirring model *(14 pages)* 125016
Harunobu Fujimura, Tatsuma Nishioka, and Soichiro Shimamori

Canonical quantization of Teukolsky fields on Kerr backgrounds *(18 pages)* 125017
Claudio Iuliano and Jochen Zahn

Consequences of gauging the Weyl symmetry and the two-dimensional conformal anomaly *(14 pages)* 125018
Omar Zanusso

Clothed particle representation in quantum field theory: Fermion mass renormalization due to vector boson exchange *(18 pages)* 125019
Yan Kostylenko and Aleksandr Shebeko

Berends-Giele currents for extended gravity *(10 pages)* 125020
Yi-Xiao Tao

Dissipation dynamics of a scalar field *(17 pages)* 125021
Laura Batini, Eduardo Grossi, and Nicolas Wink

Coherent states of quantum spacetimes for black holes and de Sitter spacetime *(21 pages)* 126001
Diego J. Cirilo-Lombardo and Norma G. Sanchez

String-breaking of the triply heavy baryon at finite temperature and chemical potential *(12 pages)* 126002
Jia-Jie Jiang, Xun Chen, Jiajia Qin, and Miguel Angel Martin Contreras

Symmetries and charges in Weyl-Fefferman-Graham gauge *(19 pages)* 126003
Luca Ciambelli, Arnaud Delfante, Romain Ruzziconi, and Céline Zwikel

Spacetime dynamics of chiral magnetic currents in a hot non-Abelian plasma *(11 pages)* 126004
Sebastian Grieninger and Dmitri E. Kharzeev

Reconstructing the boundary of AdS from an infrared defect *(16 pages)* 126005
Cesar Arias

Black hole singularity resolution in $D = 2$ via duality-invariant α' corrections *(26 pages)* 126006
Tomas Codina, Olaf Hohm, and Barton Zwiebach

AdS_3 T duality and evidence for $\mathcal{N} = 5, 6$ superconformal quantum mechanics *(9 pages)* 126007
Andrea Conti

Carrollian c functions and flat space holographic RG flows in $BMS_3/CCFT_2$ *(11 pages)* 126008
Daniel Grumiller and Max Riegler

Features of a dark energy model in string theory *(9 pages)* 126009
Souvik Banerjee, Ulf Danielsson, and Suvendu Giri

Real-time dynamics of axial charge and chiral magnetic current in a non-Abelian expanding plasma *(20 pages)* 126010
Sebastian Grieninger and Sergio Morales-Tejera

Non-Markovian speedup dynamics of a photon induced by gravitational redshift *(9 pages)* 126011
Zhen-Dong Wei, Wei Han, Ying-Jie Zhang, Shao-Jiang Du, Yun-Jie Xia, and Heng Fan

Tree-level color-kinematics duality from pure spinor actions *(10 pages)* 126012
Leron Borsten, Branislav Jurčo, Hyungrok Kim, Tommaso Macrelli, Christian Saemann, and Martin Wolf

Odd entanglement entropy in $T\bar{T}$ deformed CFT_2s and holography *(21 pages)* 126013
Debarshi Basu, Saikat Biswas, Ankur Dey, Boudhayan Paul, and Gautam Sengupta

Entanglement entropy in a time-dependent holographic Schwinger pair creation *(8 pages)* 126014
Sebastian Grieninger, Dmitri E. Kharzeev, and Ismail Zahed

Transport properties of a holographic model with novel gauge-axion coupling *(14 pages)* 126015
Lin-Yue Bai, Jian-Pin Wu, and Zhen-Hua Zhou

Entanglement entropy analysis of dyonic black holes using doubly holographic theory *(21 pages)* 126016
Hyun-Sik Jeong, Keun-Young Kim, and Ya-Wen Sun

(Continued)

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. D **90**, 00001 (2014).

PHYSICAL REVIEW D **THIRD SERIES, VOLUME 108, NUMBER 12** **D15 DECEMBER 2023**

Aspects of conformal gravity and double field theory from a double copy map *(9 pages)* 126017
Eric Lescano, Gabriel Menezes, and Jesús A. Rodríguez

Generalized volume complexity in Gauss-Bonnet gravity: Constraints and phase transitions *(12 pages)* 126018
Xuanhua Wang, Ran Li, and Jin Wang

Fluid-gravity correspondence and causal first-order relativistic viscous hydrodynamics *(8 pages)* 126019
Luca Ciambelli and Luis Lehner

Taxonomy of scalar potential with U-dual fluxes *(30 pages)* 126020
George K. Leontaris and Pramod Shukla

Quantization of the ModMax oscillator *(31 pages)* 126021
Christian Ferko, Alisha Gupta, and Eashan Iyer

Nonequilibrium thermodynamics perspectives for the monotonicity of the renormalization group flow *(19 pages)* 126022
Ki-Seok Kim and Shinsei Ryu

Generating quantum matrix geometry from gauged quantum mechanics *(34 pages)* 126023
Kazuki Hasebe

Holographic stability for non-$q\bar{q}$ candidates *(10 pages)* 126024
Miguel Angel Martin Contreras and Alfredo Vega

COMMENTS

Comment on "Regular evaporating black holes with stable cores" *(3 pages)* 128501
Raúl Carballo-Rubio, Francesco Di Filippo, Stefano Liberati, Costantino Pacilio, and Matt Visser

Reply to "Comment on 'Regular evaporating black holes with stable cores' " *(3 pages)* 128502
Alfio Bonanno, Amir-Pouyan Khosravi, and Frank Saueressig

ERRATA

Erratum: Gravitational wave detection with high frequency phonon trapping acoustic cavities [Phys. Rev. D **90**, 102005 (2014)] *(3 pages)* 129901
Maxim Goryachev and Michael E. Tobar

Erratum: New form of all black holes of type D with a cosmological constant [Phys. Rev. D **107**, 084034 (2023)] *(2 pages)* 129902
Jiří Podolský and Adam Vrátný

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. D **90**, 00001 (2014).