

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

Postmaster send address changes to:

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

THIRD SERIES, VOLUME 107, NUMBER 8

CONTENTS

D15 APRIL 2023

The Table of Contents is a total listing of Parts A and B.

Part A consists of articles 081301–084006, and Part B articles 084007–089902(E)

PART A

LETTERS

Ultraslow PSR J0901-4046 with an ultrahigh magnetic field of 3.2×10^{16} G (7 pages)	L081301
D. N. Sob'yanin	
Quadrupole instability of static scalarized black holes (5 pages)	L081501
Burkhard Kleihaus, Jutta Kunz, Tim Utermöhlen, and Emanuele Berti	
Kinematic Hopf algebra for amplitudes and form factors (8 pages)	L081701
Gang Chen, Guanda Lin, and Congkao Wen	
Bern-Carrasco-Johansson relations in $\text{AdS}_5 \times S^3$ and the double-trace spectrum of super gluons (7 pages)	L081901
J. M. Drummond, R. Glew, and M. Santagata	

ARTICLES

Second-generation time-delay interferometry (11 pages)	082001
Massimo Tinto, Sanjeev Dhurandhar, and Dishari Malakar	
Exploring dark photons via a subfrequency laser search in gravitational wave detectors (8 pages)	082002
M. Afif Ismail, Chrisna Setyo Nugroho, and Henry Tsz-King Wong	
Searches for mass-asymmetric compact binary coalescence events using neural networks in the LIGO/Virgo third observation period (9 pages)	082003
M. Andrés-Carcasona, A. Menéndez-Vázquez, M. Martínez, and Ll. M. Mir	
Effectiveness of null time-delay interferometry channels as instrument noise monitors in LISA (15 pages)	082004
Martina Muratore, Olaf Hartwig, Daniele Vetrugno, Stefano Vitale, and William Joseph Weber	
Search for Lorentz-invariance violation with the first KATRIN data (9 pages)	082005
M. Aker <i>et al.</i> (KATRIN Collaboration)	
Expected signature for the Lorentz invariance violation effects on γ - γ absorption (8 pages)	083001
Y. G. Zheng, S. J. Kang, K. R. Zhu, C. Y. Yang, and J. M. Bai	
Compact dark objects in neutron star mergers (17 pages)	083002
Andreas Bauswein, Gang Guo, Jr-Hua Lien, Yen-Hsun Lin, and Meng-Ru Wu	
Comparing accretion disks and dark matter spikes in intermediate mass ratio inspirals (16 pages)	083003
Niklas Becker and Laura Sagunski	
New bound on Lorentz violation based on the absence of vacuum Cherenkov radiation in ultrahigh energy air showers (6 pages)	083004
Fabian Duenkel, Marcus Niechciol, and Markus Risse	
Adiabatically compressed wave dark matter halo and intermediate-mass-ratio inspirals (18 pages)	083005
Hyungjin Kim, Alessandro Lenoci, Isak Stomberg, and Xiao Xue	



(Continued)

2470-0010(20230415)107:8;1-E



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**, 020001 (2014).

Measuring dark matter spikes around primordial black holes with Einstein Telescope and Cosmic Explorer (20 pages)	083006
Philippa S. Cole, Adam Coogan, Bradley J. Kavanagh, and Gianfranco Bertone	
Constraining the surface curvature of an anisotropic neutron star (8 pages)	083007
H. C. Das, Jeet Amrit Pattnaik, and S. K. Patra	
Bump hunting in the diffuse flux of high-energy cosmic neutrinos (30 pages)	083008
Damiano F. G. Fiorillo and Mauricio Bustamante	
 Testing hadronic and photohadronic interactions as responsible for ultrahigh energy cosmic rays and neutrino fluxes from starburst galaxies (13 pages)	083009
Antonio Condorelli, Denise Boncioli, Enrico Peretti, and Sergio Petrerà	
Gravothermal collapse of self-interacting dark matter halos as the origin of intermediate mass black holes in Milky Way satellites (19 pages)	083010
Tamar Meshveliani, Jesús Zavala, and Mark R. Lovell	
Constraining axion and compact dark matter with interstellar medium heating (14 pages)	083011
Digvijay Wadekar and Zihui Wang	
Celestial objects as strongly-interacting nonannihilating dark matter detectors (11 pages)	083012
Anupam Ray	
Cosmic radio background from primordial black holes at cosmic dawn (16 pages)	083013
Zhihe Zhang, Bin Yue, Yidong Xu, Yin-Zhe Ma, Xuelei Chen, and Maoyuan Liu	
Multifield ultralight dark matter (11 pages)	083014
Mateja Gosenca, Andrew Eberhardt, Yourong Wang, Benedikt Eggemeier, Emily Kendall, J. Luna Zagorac, and Richard Easther	
Long-term gravitational wave asteroseismology of supernovae: From core collapse to 20 seconds postbounce (12 pages)	083015
Masamitsu Mori, Yudai Suwa, and Tomoya Takiwaki	
Evolution of collisional neutrino flavor instabilities in spherically symmetric supernova models (20 pages)	083016
Zewei Xiong, Meng-Ru Wu, Gabriel Martínez-Pinedo, Tobias Fischer, Manu George, Chun-Yu Lin, and Lucas Johns	
 Characterizing a supernova's standing accretion shock instability with neutrinos and gravitational waves (24 pages)	083017
Zidu Lin, Abhinav Rijal, Cecilia Lunardini, Manuel D. Morales, and Michele Zanolin	
Generation of primordial black holes from an inflation model with modified dispersion relation (11 pages)	083018
Taotao Qiu, Wenyi Wang, and Ruifeng Zheng	
Unified model for the LISA measurements and instrument simulations (31 pages)	083019
Jean-Baptiste Bayle and Olaf Hartwig	
Exact formulations of relativistic electrodynamics and magnetohydrodynamics with helically coupled scalar field (31 pages)	083020
Jai-chan Hwang and Hyerim Noh	
Identifying modified theories of gravity using binary black-hole ringdowns (13 pages)	083021
Costantino Pacilio and Swetha Bhagwat	
Constraining dark matter interactions mediated by a light scalar with white dwarfs (6 pages)	083022
Maura E. Ramirez-Quezada	
Probing phase transitions in neutron stars via the crust-core interfacial mode (20 pages)	083023
Jiaxiang Zhu, Chuming Wang, Chengjun Xia, Enping Zhou, and Yiqiu Ma	
Further evidence for ultrahigh-energy cosmic ray acceleration in starburst-driven superwinds (9 pages)	083024
Luis Alfredo Anchordoqui	
Hybrid stars with reactive interfaces: Analysis within the Nambu–Jona-Lasinio model (12 pages)	083025
C. H. Lenzi, G. Lugones, and C. Vasquez	
Deep learning techniques for imaging air Cherenkov telescopes (27 pages)	083026
Songshaptak De, Writasree Maitra, Vikram Rentala, and Arun M. Thalappillil	
Constraints on axionlike particles from a combined analysis of three flaring <i>Fermi</i> flat-spectrum radio quasars (17 pages)	083027
James Davies, Manuel Meyer, and Garret Cotter	
Reconstructing the neutron star equation of state from observational data via automatic differentiation (7 pages)	083028
Shriya Soma, Lingxiao Wang, Shuzhe Shi, Horst Stöcker, and Kai Zhou	

(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**, 020001 (2014).

Inference of protoneutron star properties in core-collapse supernovae from a gravitational-wave detector network (15 pages)	083029
Tristan Bruel, Marie-Anne Bizouard, Martin Obergaulinger, Patricio Maturana-Russel, Alejandro Torres-Forné, Pablo Cerdá-Durán, Nelson Christensen, José A. Font, and Renate Meyer	
☞ Constraining the dark matter contribution of γ rays in clusters of galaxies using <i>Fermi</i> -LAT data (24 pages)	083030
Mattia Di Mauro, Judit Pérez-Romero, Miguel A. Sánchez-Conde, and Nicolao Fornengo	
New determination of the production cross section for γ rays in the Galaxy (12 pages)	083031
Luca Orusa, Mattia Di Mauro, Fiorenza Donato, and Michael Korsmeier	
Probing the blue axion with cosmic optical background anisotropies (21 pages)	083032
Pierluca Carenza, Giuseppe Lucente, and Edoardo Vitagliano	
Impact of combinations of time-delay interferometry channels on stochastic gravitational wave background detection (17 pages)	083033
Zheng-Cheng Liang, Zhi-Yuan Li, Jun Cheng, En-Kun Li, Jian-dong Zhang, and Yi-Ming Hu	
Collision-induced flavor instability in dense neutrino gases with energy-dependent scattering (7 pages)	083034
Yu-Chia Lin and Huaiyu Duan	
Probing dark matter with polarimetry techniques (11 pages)	083035
A. Ejlli, S. M. Vermeulen, E. Schwartz, L. Aiello, and H. Grote	
Explorations of pseudo-Dirac dark matter having keV splittings and interacting via transition electric and magnetic dipole moments (27 pages)	083036
Shiuli Chatterjee and Ranjan Laha	
Constraining properties of asymmetric dark matter candidates from gravitational-wave observations (20 pages)	083037
Divya Singh, Anuradha Gupta, Emanuele Berti, Sanjay Reddy, and B. S. Sathyaprakash	
Light scalar explanation for the 18 TeV GRB 221009A (6 pages)	083038
Shyam Balaji, Maura E. Ramirez-Quezada, Joseph Silk, and Yongchao Zhang	
Large deviations in the early Universe (19 pages)	083501
Timothy Cohen, Daniel Green, and Akhil Premkumar	
Subtracting the kinetic Sunyaev-Zeldovich effect from the cosmic microwave background with surveys of large-scale structure (33 pages)	083502
Simon Foreman, Selim C. Hotinli, Mathew S. Madhavacheril, Alexander van Engelen, and Christina D. Kreisch	
Constraining constant and tomographic coupled dark energy with low-redshift and high-redshift probes (24 pages)	083503
Lisa W. K. Goh, Adrià Gómez-Valent, Valeria Pettorino, and Martin Kilbinger	
☞ Dark Energy Survey Year 3 results: Constraints on extensions to Λ CDM with weak lensing and galaxy clustering (48 pages)	083504
T. M. C. Abbott <i>et al.</i> (DES Collaboration)	
Lensing constraints on ultradense dark matter halos (17 pages)	083505
M. Sten Delos and Gabriele Franciolini	
Reconstruction methods and the amplification of the inflationary spectrum (13 pages)	083506
Leonardo Chataignier, Alexander Yu. Kamenshchik, Alessandro Tronconi, and Giovanni Venturi	
Baryogenesis and primordial black hole dark matter from heavy metastable particles (10 pages)	083507
Barmak Shams Es Haghi	
Axion cosmology with post-Newtonian corrections (21 pages)	083508
Jai-chan Hwang and Hyerim Noh	
Mass renormalization in lattice simulations of false vacuum decay (16 pages)	083509
Jonathan Braden, Matthew C. Johnson, Hiranya V. Peiris, Andrew Pontzen, and Silke Weinfurter	
Axion minivoids and implications for direct detection (18 pages)	083510
Benedikt Eggemeier, Ciaran A. J. O'Hare, Giovanni Pierobon, Javier Redondo, and Yvonne Y. Y. Wong	
Inflation in Weyl scaling invariant gravity with R^3 extensions (13 pages)	083511
Qing-Yang Wang, Yong Tang, and Yue-Liang Wu	
Big bang nucleosynthesis constraints on varying electron mass solution to the Hubble tension (5 pages)	083512
Osamu Seto and Yo Toda	
Soliton formation and the core-halo mass relation: An eigenstate perspective (11 pages)	083513
J. Luna Zagorac, Emily Kendall, Nikhil Padmanabhan, and Richard Easther	

(Continued)



Quantitative constraints on modified gravity paradigms (11 pages)	083514
S. R. Pinto, A. M. Cabral, and C. J. A. P. Martins	
Cosmology with the galaxy bispectrum multipoles: Optimal estimation and application to BOSS data (28 pages)	083515
Mikhail M. Ivanov, Oliver H. E. Philcox, Giovanni Cabass, Takahiro Nishimichi, Marko Simonović, and Matias Zaldarriaga	
Response of the Einstein Telescope to Doppler anisotropies (18 pages)	083516
Debika Chowdhury, Gianmassimo Tasinato, and Ivonne Zavala	
Super-horizon resonant magnetogenesis during inflation (12 pages)	083517
Misao Sasaki, Valeri Vardanyan, and Vicharit Yingcharoenrat	
Missing one-loop contributions in secondary gravitational waves (16 pages)	083518
Chao Chen, Atsuhisa Ota, Hui-Yu Zhu, and Yuhang Zhu	
Dark photon dark matter from an oscillating dilaton (9 pages)	083519
Peter Adshead, Kaloian D. Lozanov, and Zachary J. Weiner	
Using machine learning to compress the matter transfer function $T(k)$ (11 pages)	083520
J. Bayron Orjuela-Quintana, Savvas Nesseris, and Wilmar Cardona	
Accurate estimation of angular power spectra for maps with correlated masks (20 pages)	083521
Kristen M. Surrao, Oliver H. E. Philcox, and J. Colin Hill	
Dark matter and gravitational waves from a dark big bang (31 pages)	083522
Katherine Freese and Martin Wolfgang Winkler	
New accretion constraint on the evaporation of primordial black holes (14 pages)	083523
Seyed Sajad Tabasi, Mahsa Berahman, and Javad T. Firouzjaee	
Galaxy rotation favors prolate dark matter haloes (30 pages)	083524
Adriana Bariego-Quintana, Felipe J. Llanes-Estrada, and Oliver Manzanilla Carretero	
Improved analytical modeling of the nonlinear power spectrum in modified gravity cosmologies (17 pages)	083525
Suhani Gupta, Wojciech A. Hellwing, and Maciej Bilicki	
Combining gravitational lensing and gravitational redshift to measure the anisotropic stress with future galaxy surveys (15 pages)	083526
Isaac Tutusaus, Daniel Sobral Blanco, and Camille Bonvin	
H_0 and S_8 tensions necessitate early and late time changes to Λ CDM (14 pages)	083527
Steven J. Clark, Kyriakos Vattis, JiJi Fan, and Savvas M. Koushiappas	
Wide-angle and relativistic effects in Fourier-space clustering statistics (32 pages)	083528
Milad Noorikuhani and Roman Scoccimarro	
Redshift evolution of cosmic birefringence in CMB anisotropies (18 pages)	083529
Matteo Galaverni, Fabio Finelli, and Daniela Paoletti	
Aspects of the dark dimension in cosmology (9 pages)	083530
Luis A. Anchordoqui, Ignatios Antoniadis, and Dieter Lüst	
Chern Simons condensate from misaligned axions (14 pages)	083531
Shuyang Cao and Daniel Boyanovsky	
Role of the Hubble scale in the weak lensing versus CMB tension (11 pages)	083532
Lucas F. Secco, Tanvi Karwal, Wayne Hu, and Elisabeth Krause	
Bouncing cosmology from nonlinear dark energy with two cosmological constants (25 pages)	083533
Molly Burkmar and Marco Bruni	
Radial linear stability of nonrelativistic ℓ -boson stars (23 pages)	084001
Armando A. Roque, Emmanuel Chávez Nambo, and Olivier Sarbach	
Topological classes of thermodynamics of rotating AdS black holes (15 pages)	084002
Di Wu (吴迪) and Shuang-Qing Wu (吴双清)	
Particle motions around regular black holes (11 pages)	084003
Kenshin Isomura, Ryotaku Suzuki, and Shinya Tomizawa	
Relativistic cosmology and intrinsic spin of matter: Results and theorems in Einstein-Cartan theory (22 pages)	084004
Paulo Luz and José P. S. Lemos	
Graviton noise on tidal forces and geodesic congruences (11 pages)	084005
Hing-Tong Cho and Bei-Lok Hu	

(Continued)



Modeling horizon absorption in spinning binary black holes using effective worldline theory (27 pages)	084006
M. V. S. Saketh, Jan Steinhoff, Justin Vines, and Alessandra Buonanno	

PART B

Inflationary dynamics and swampland criteria for modified Gauss-Bonnet gravity compatible with GW170817 (20 pages)	084007
S. D. Odintsov, V. K. Oikonomou, and F. P. Fronimos	
Hadamard tail from initial data on the light cone (14 pages)	084008
David Q. Aruquipa and Marc Casals	
Theories of gravity with nonminimal matter-curvature coupling and the de Sitter swampland conjectures (7 pages)	084009
Orfeu Bertolami, Cláudio Gomes, and Paulo M. Sá	
Using rational filters to uncover the first ringdown overtone in GW150914 (27 pages)	084010
Sizheng Ma, Ling Sun, and Yanbei Chen	
Tidal deformations of a binary system induced by an external Kerr black hole (17 pages)	084011
Filippo Camilloni, Gianluca Grignani, Troels Harmark, Roberto Oliveri, Marta Orselli, and Daniele Pica	
Critical phenomena in the collapse of quadrupolar and hexadecapolar gravitational waves (17 pages)	084012
Thomas W. Baumgarte, Carsten Gundlach, and David Hilditch	
Is it possible to construct asymptotically flat initial data using the evolutionary forms of the constraints? (17 pages)	084013
Károly Csukás and István Rác	
Slowly rotating and accelerating α' -corrected black holes in four and higher dimensions (13 pages)	084014
Felipe Agurto-Sepúlveda, Mariano Chernicoff, Gaston Giribet, Julio Oliva, and Marcelo Oyarzo	
Quantum backreaction for overspinning BTZ geometries (7 pages)	084015
Olaf Baake and Jorge Zanelli	
Black hole superradiance in dynamical Chern-Simons gravity (19 pages)	084016
Stephon Alexander, Gregory Gabadadze, Leah Jenks, and Nicolás Yunes	
Effective-one-body Hamiltonian in scalar-tensor gravity at third post-Newtonian order (19 pages)	084017
Tamanna Jain, Piero Retegno, Michalis Agathos, Alessandro Nagar, and Lorenzo Turco	
Nonlocal-in-time effective one body Hamiltonian in scalar-tensor gravity at third post-Newtonian order (9 pages)	084018
Tamanna Jain	
Detecting sublunar-mass primordial black holes with the Earth-Moon binary system (16 pages)	084019
Ya-Ling Li, Guo-Qing Huang, Zong-Qiang Huang, and Fu-Wen Shu	
Constraining deviations from spherical symmetry using γ -metric (12 pages)	084020
Hrishikesh Chakrabarty and Yong Tang	
Success of the small mass-ratio approximation during the final orbits of binary black hole simulations (7 pages)	084021
Sergi Navarro Albalat, Aaron Zimmerman, Matthew Giesler, and Mark A. Scheel	
Stability and physical properties of spherical excited scalar boson stars (15 pages)	084022
Marco Brito, Carlos Herdeiro, Eugen Radu, Nicolas Sanchis-Gual, and Miguel Zilhão	
Dispersive censor of acoustic spacetimes with a shock-wave singularity (11 pages)	084023
Uwe R. Fischer and Satadal Datta	
Polar modes and isospectrality of Ellis-Bronnikov wormholes (15 pages)	084024
Bahareh Azad, Jose Luis Blázquez-Salcedo, Xiao Yan Chew, Jutta Kunz, and Dong-han Yeom	
Casimir tests of scalar-tensor theories (16 pages)	084025
Philippe Brax, Anne-Christine Davis, and Benjamin Elder	
Numerical-relativity-informed effective-one-body model for black-hole–neutron-star mergers with higher modes and spin precession (22 pages)	084026
Alejandra Gonzalez, Rossella Gamba, Matteo Breschi, Francesco Zappa, Gregorio Carullo, Sebastiano Bernuzzi, and Alessandro Nagar	
Gravitational-wave imprints of compact and galactic-scale environments in extreme-mass-ratio binaries (19 pages)	084027
Kyriakos Destounis, Arun Kulathingal, Kostas D. Kokkotas, and Georgios O. Papadopoulos	
Wald-Zoupas prescription with soft anomalies (23 pages)	084028
Gloria Odak, Antoine Rignon-Bret, and Simone Speziale	

(Continued)



Control scheme for polarization circulation speed meter using a dual-retardation waveplate (10 pages)	084029
Yohei Nishino, Tomotada Akutsu, Yoichi Aso, and Takayuki Tomaru	
Revisiting the matching of black hole tidal responses: A systematic study of relativistic and logarithmic corrections (40 pages)	084030
Mikhail M. Ivanov and Zihan Zhou	
Quasinormal modes of slowly rotating Kerr-Newman black holes using the double series method (22 pages)	084031
Jose Luis Blázquez-Salcedo and Fei Chen Khoo	
Energy nonconservation and relativistic trajectories: Unimodular gravity and beyond (14 pages)	084032
Y. Bonder, J. E. Herrera, and A. M. Rubiol	
Constraining the number of spacetime dimensions from GWTC-3 binary black hole mergers (9 pages)	084033
Ignacio Magaña Hernandez	
New form of all black holes of type D with a cosmological constant (29 pages)	084034
Jiří Podolský and Adam Vrátný	
Multicritical phase transitions in Lovelock AdS black holes (7 pages)	084035
Jerry Wu and Robert B. Mann	
Radiative gravastar with thermal spectrum: Sudden vacuum condensation without gravitational collapse (11 pages)	084036
Ken-ichi Nakao, Kazumasa Okabayashi, and Tomohiro Harada	
Combining effective-one-body accuracy and reduced-order-quadrature speed for binary neutron star merger parameter estimation with machine learning (22 pages)	084037
Jacopo Tissino, Gregorio Carullo, Matteo Breschi, Rossella Gamba, Stefano Schmidt, and Sebastiano Bernuzzi	
Enhanced power of gravitational waves and rapid coalescence of black hole binaries through k -essence dark energy accretion (12 pages)	084038
Arnab Sarkar, Amna Ali, K. Rajesh Nayak, and A. S. Majumdar	
Black hole greybody factors from Korteweg–de Vries integrals: Computation (21 pages)	084039
Michele Lenzi and Carlos F. Sopuerta	
Particle motion in the Einstein-Euler-Heisenberg rotating black hole spacetime (11 pages)	084040
Daniel Amaro, Claus Lämmerzahl, and Alfredo Macías	
Perturbative and numerical approach to plasma strong lensing (24 pages)	084041
Gabriel Crisnejo, Emanuel Gallo, Ezequiel F. Boero, and Osvaldo M. Moreschi	
☞ Imaging topological solitons: The microstructure behind the shadow (15 pages)	084042
Pierre Heidmann, Ibrahima Bah, and Emanuele Berti	
Observational tests of a quantum extension of Schwarzschild spacetime in loop quantum gravity with stars in the Galactic Center (13 pages)	084043
Jian-Ming Yan, Cheng Liu, Tao Zhu, Qiang Wu, and Anzhong Wang	
Spin vector deviation and the gravitational wave memory effect between two free-falling gyroscopes in the plane wave spacetimes (11 pages)	084044
Ke Wang and Chao-Jun Feng	
Accurate characterization of the stochastic gravitational-wave background with pulsar timing arrays by likelihood reweighting (10 pages)	084045
Sophie Hourihane, Patrick Meyers, Aaron Johnson, Katerina Chatziioannou, and Michele Vallisneri	
Adapting to noise distribution shifts in flow-based gravitational-wave inference (13 pages)	084046
Jonas Wildberger, Maximilian Dax, Stephen R. Green, Jonathan Gair, Michael Pürrer, Jakob H. Macke, Alessandra Buonanno, and Bernhard Schölkopf	
High precision numerical sequences of rotating hairy black holes (28 pages)	084047
Gustavo García, Eric Gourgoulhon, Philippe Grandclément, and Marcelo Salgado	
Observational properties of relativistic fluid spheres with thin accretion disks (21 pages)	084048
João Luís Rosa	
Analogous Hawking radiation from gapped excitations in a transonic flow of binary Bose-Einstein condensates (13 pages)	084049
Wei-Can Syu and Da-Shin Lee	
Conformally coupled scalar in Lovelock theory (7 pages)	084050
Eugeny Babichev, Christos Charmousis, Mokhtar Hassaine, and Nicolas Lecoer	

(Continued)



Detection of the gravitational memory effect in LISA using triggers from ground-based detectors (10 pages)	084051
Sourath Ghosh, Alexander Weaver, Jose Sanjuan, Paul Fulda, and Guido Mueller	
Superradiant energy extraction from rotating hairy Horndeski black holes (15 pages)	084052
Sohan Kumar Jha, Mohsen Khodadi, Anisur Rahaman, and Ahmad Sheykhi	
Thermal stability of hairy black holes (14 pages)	084053
Nikos Chatzifotis, Panagiotis Dorlis, Nick E. Mavromatos, and Eleftherios Papantonopoulos	
Enhanced anti-Unruh effect by simulated light-matter interaction (8 pages)	085001
Yongjie Pan and Baocheng Zhang	
Analog de Sitter universe in quantum Hall systems with an expanding edge (14 pages)	085002
Yasusada Nambu and Masahiro Hotta	
Entanglement generation and decoherence in a two-qubit system mediated by relativistic quantum field (35 pages)	085003
Yoshimasa Hidaka, Satoshi Iso, and Kengo Shimada	
Pseudoclassical system with gauge and time-reparametrization invariance (8 pages)	085004
Mauricio Valenzuela	
Asymptotically flat vacuum solutions in order-reduced semiclassical gravity (19 pages)	085005
Julio Arrechea, Carlos Barceló, Raúl Carballo-Rubio, and Luis J. Garay	
Quantum statistical mechanics near a black hole horizon (17 pages)	085006
Eirini Sourtzinou and Charis Anastopoulos	
Dyonic matter equations, exact point-source solutions, and charged black holes in generalized Born-Infeld theory (23 pages)	085007
Yisong Yang	
Quantum scale invariance in gauge theories and applications to muon production (13 pages)	085008
M. Weißwange, D. M. Ghilencea, and D. Stöckinger	
Robustness of entanglement in Hawking radiation for optical systems immersed in thermal baths (12 pages)	085009
Ivan Agullo, Anthony J. Brady, and Dimitrios Kranas	
Hawking radiation inside a charged black hole (26 pages)	085010
Tyler McMaken and Andrew J. S. Hamilton	
Binary dynamics from worldline QFT for scalar QED (8 pages)	085011
Tianheng Wang	
Simplest oscillon and its sphaleron (13 pages)	085012
N. S. Manton and T. Romańczukiewicz	
Renormalization group for nonminimal $\phi^2 R$ couplings and gravitational contact interactions (12 pages)	085013
Dumitru Ghilencea and Christopher T. Hill	
Global monopoles in the extended Gauss-Bonnet gravity (12 pages)	085014
Nikos Chatzifotis, Nick E. Mavromatos, and Dionysios P. Theodosopoulos	
Integrable sigma models on Riemann surfaces (8 pages)	085015
Dmitri Bykov	
Frame dependence of the nonrelativistic limit of quantum fields (17 pages)	085016
Riccardo Falcone and Claudio Conti	
Decomposition, trivially-acting symmetries, and topological operators (24 pages)	085017
Daniel G. Robbins, Eric Sharpe, and Thomas Vandermeulen	
Low-energy states and <i>CPT</i> invariance at the big bang (16 pages)	085018
Sergi Nadal-Gisbert, José Navarro-Salas, and Silvia Pla	
Singular supertranslations and Chern-Simons theory on the black hole horizon (29 pages)	085019
Ratindranath Akhoury, Sangmin Choi, and Malcolm J. Perry	
Thermal quantum gravity in a general background gauge (8 pages)	085020
F. T. Brandt, J. Frenkel, D. G. C. McKeon, and G. S. S. Sakoda	
Axion-photon interaction from nonminimal dimension-five Lorentz-violating operators (10 pages)	085021
A. J. G. Carvalho, A. G. Dias, A. F. Ferrari, T. Mariz, J. R. Nascimento, and A. Yu. Petrov	
Null energy condition violation: Tunneling versus the Casimir effect (10 pages)	085022
Jean Alexandre and Drew Backhouse	

(Continued)



Quantum corrections to the Schwarzschild metric from vacuum polarization (<i>15 pages</i>)	085023
Pau Beltrán-Palau, Adrián del Río, and José Navarro-Salas	
Thermalization and prethermalization in the soft-wall AdS/QCD model (<i>16 pages</i>)	086001
Xuanmin Cao, Jingyi Chao, Hui Liu, and Danning Li	
✂ Entanglement wedges for gravitating regions (<i>12 pages</i>)	086002
Raphael Bousso and Geoff Penington	
Entanglement negativity on random spin networks (<i>28 pages</i>)	086003
Simone Cepollaro, Goffredo Chirco, Gianluca Cuffaro, and Vittorio D'Esposito	
Machine learning on generalized complete intersection Calabi-Yau manifolds (<i>12 pages</i>)	086004
Wei Cui, Xin Gao, and Juntao Wang	
Vortices in a rotating holographic superfluid with Lifshitz scaling (<i>8 pages</i>)	086005
Ankur Srivastav and Sunandan Gangopadhyay	
Properties of multiple D0-brane systems: 11D origin, equations of motion, and their solutions (<i>21 pages</i>)	086006
Igor Bandos and Unai D. M. Sarraga	
Landscape of polymer quantum cosmology (<i>23 pages</i>)	086007
Lautaro Amadei, Alejandro Perez, and Salvatore Ribisi	
Double field theory with matter and the generalized Bergshoeff–de Roo identification (<i>9 pages</i>)	086008
Eric Lescano and Nahuel Mirón-Granese	
Stochastic dynamics for group field theories (<i>43 pages</i>)	086009
Vincent Lahoche and Dine Ousmane Samary	
Holographic entanglement entropy and mutual information in deformed field theories at finite temperature (<i>24 pages</i>)	086010
Hajar Ebrahim and Monireh Ahmadvpour	
Classical integrability of root- $T\bar{T}$ flows (<i>20 pages</i>)	086011
Riccardo Borsato, Christian Ferko, and Alessandro Sfondrini	
Temperature in relativistic fluids (<i>8 pages</i>)	086012
Pavel Kovtun	
Measuring the homogeneity of the quantum universe (<i>15 pages</i>)	086013
R. Loll and A. Silva	
Quantum neuromorphic approach to efficient sensing of gravity-induced entanglement (<i>14 pages</i>)	086014
Tanjung Krisnanda, Tomasz Paterek, Mauro Paternostro, and Timothy C. H. Liew	
✂ IIB string theory explored: Reflection 7-branes (<i>22 pages</i>)	086015
Markus Dierigl, Jonathan J. Heckman, Miguel Montero, and Ethan Torres	
Holographic confining-deconfining gauge theories and entanglement measures with a magnetic field (<i>31 pages</i>)	086016
Parul Jain, Siddhi Swarupa Jena, and Subhash Mahapatra	

ERRATA

Erratum: Adiabatic waveforms for extreme mass-ratio inspirals via multivoice decomposition in time and frequency [Phys. Rev. D 103 , 104014 (2021)] (<i>1 pages</i>)	089901
Scott A. Hughes, Niels Warburton, Gaurav Khanna, Alvin J. K. Chua, and Michael L. Katz	
Erratum: Indirect signals of dark matter can change depending on where you look [Phys. Rev. D 107 , 023002 (2023)] (<i>1 pages</i>)	089902
Hooman Davoudiasl and Julia Gehrlein	

