PHYSICAL REVIEW B **THIRD SERIES, VOLUME 110, NUMBER 14** **OCTOBER 2024-1(II)**

Pairing susceptibility in the weakly interacting multilayer Hubbard model evaluated by direct perturbative expansion *(17 pages)* 144511
Rayan Farid and J. P. F. LeBlanc

Self-consistent study of topological superconductivity in two-dimensional quasicrystals *(13 pages)* 144512
Masahiro Hori, Takanori Sugimoto, Takami Tohyama, and K. Tanaka

Stability limits of flux states in two-band superconductor rings *(11 pages)* 144513
Leonardo Rodrigues Cadorim, Edson Sardella, Daniel Domínguez, and Jorge Berger

Chiral modes of giant superfluid vortices *(9 pages)* 144514
Gabriel Cuomo, Zohar Komargodski, and Siwei Zhong

Pressure-induced superconductivity in quasi-one-dimensional ZrS_3 *(8 pages)* 144515
Binbin Yue, Wei Zhong, He Zhang, Jie Zhou, Jingwei Miao, Saori Kawaguchi, Hirokazu Kadobayashi, and Fang Hong

Existence of Hebel-Slichter peak in unconventional kagome superconductors *(12 pages)* 144516
Yi Dai, Andreas Kreisel, and Brian M. Andersen

Interaction-driven crossover from Mott insulator–superfluid criticality to Bose-Einstein condensation in a simple cubic lattice *(18 pages)* 144517
T. K. Kopeć

Probing the Berezinskii-Kosterlitz-Thouless vortex unbinding transition in two-dimensional superconductors using local noise magnetometry *(21 pages)* 144518
Jonathan B. Curtis, Nikola Maksimovic, Nicholas R. Poniatowski, Amir Yacoby, Bertrand Halperin, Prineha Narang, and Eugene Demler

Induction of orbital currents and Kapitza stabilization in superconducting circuits with Laguerre-Gaussian microwave beams *(11 pages)* 144519
Hennadii Yerzhakov, Tien-Tien Yeh, and Alexander Balatsky

Superconductivity in the quasi-one-dimensional ternary compound $Ca_3Pt_4Bi_8$ *(8 pages)* 144520
Jinjin Wang, Lihong Hu, Shuxiang Li, Chenxi Jiang, Zheng Li, Qian Tao, Fanming Qu, Li Lu, Guangtong Liu, and Zhu-An Xu

Magnetoelectric effect in the helical state of a superconductor/ferromagnet bilayer *(6 pages)* 144521
V. Plastovets and A. Buzdin

Antiferromagnetic Josephson junction: Nonreciprocity and sublattice selective transport of Cooper triplets *(11 pages)* 144522
A. G. Mal'shukov

Superconducting dense lithium-based germanides with electride states *(12 pages)* 144523
Qianyi Wang, Jiahui Wei, Ting Zhong, Jiance Sun, Bo Gao, Li Zhu, Hanyu Liu, and Shoutao Zhang

Topological phases in twisted Rashba superconductors *(10 pages)* 144524
Conghao Lin and Xiancong Lu

Absence of a bulk signature of a charge density wave in hard x-ray measurements of UTe_2 *(8 pages)* 145101
Caitlin S. Kengle, Dipanjan Chaudhuri, Xuefei Guo, Thomas A. Johnson, Simon Bettler, Wolfgang Simeth, Matthew J. Krogstad, Zahir Islam, Sheng Ran, Shanta R. Saha, Johnpierre Paglione, Nicholas P. Butch, Eduardo Fradkin, Vidya Madhavan, and Peter Abbamonte

The editors and referees of PRB find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. B 77, 130001 (2008).

PHYSICAL REVIEW B **THIRD SERIES, VOLUME 110, NUMBER 14** **OCTOBER 2024-1(II)**

Magnon transport in antiferromagnetic strained $SrMnO_3$ thin films *(7 pages)* 144446
J. J. L. van Rijn, B. J. van Wees, and T. Banerjee

Field-dependent magnetic relaxation times of magnetic nanoparticle systems: Analytic approximations supported by numerical simulations *(11 pages)* 144447
Jonathon C. Davidson, Nicholas R. Anderson, and Karen L. Livesey

Topological magnonic properties of an antiferromagnetic chain *(14 pages)* 144448
Topojit Debnath, Shri Hari Soundararaj, Sohee Kwon, Alexander A. Balandin, and Roger K. Lake

Gigahertz-frequency antiferromagnetic resonances in the high-T_c superconductor parent compound $EuFe_2As_2$ *(9 pages)* 144449
Xiao Xiao, Zishuang Li, Zhenyu Gao, Lina Chen, Haozhe Wang, Shuai Zhang, Zui Tao, Chunjie Yan, and Ronghua Liu

Superfluidity and superconductivity

Collective modes in an unconventional superconductor with $j = \frac{3}{2}$ fermions *(9 pages)* 144501
Guangyao Li and P. M. R. Brydon

Superluminal propagation of composite collective modes in superconductor-ferromagnet heterostructures *(7 pages)* 144502
Pascal Derendorf, Anatoly F. Volkov, and Ilya M. Eremin

Discontinuous transition to a superconducting phase *(14 pages)* 144503
Takumi Sato, Shingo Kobayashi, and Yasuhiro Asano

Raman scattering study of electron-phonon coupling in superconducting $LaRu_2P_2$ *(7 pages)* 144504
Wei Ren, Helin Mei, Wenbo Sang, Mingshu Tan, Jianguo Si, Miao Liu, Jianting Ji, Feng Jin, Anmin Zhang, and Qingming Zhang

Coherence length and quantum geometry in a dilute flat-band superconductor *(9 pages)* 144505
M. Iskin

Time-reversal symmetry breaking in the *s*-wave superconductor $CaPd_2As_2$ probed by μSR *(9 pages)* 144506
Aarti, K. Panda, D. T. Adroja, A. Bhattacharyya, P. K. Biswas, A. D. Hillier, B. Lake, Samar Layek, and V. K. Anand

Absence of a bulk thermodynamic phase transition to a density wave phase in UTe_2 *(7 pages)* 144507
Florian Theuss, Avi Shragai, Gael Grissonnanche, Luciano Peralta, Gregorio de la Fuente Simarro, Ian M Hayes, Shanta R Saha, Yun Suk Eo, Alonso Suarez, Andrea Capa Salinas, Ganesh Pokharel, Stephen D. Wilson, Nicholas P Butch, Johnpierre Paglione, and B. J. Ramshaw

Absence of Fermi surface reconstruction in pressure-driven overdoped YBCO *(6 pages)* 144508
Stanley W. Tozer, William A. Coniglio, Tobias Förster, Doug A. Bonn, Walter N. Hardy, Ruixing Liang, Erik Kampert, and Audrey D. Grockowiak

Competition between d-wave and $d + is$-wave superconductivity in the Hubbard model on a checkerboard lattice *(8 pages)* 144509
Yue Pan, Runyu Ma, Chao Chen, Zixuan Jia, and Tianxing Ma

Local magnetic response of superconducting Sr_2RuO_4 thin films *(8 pages)* 144510
G. M. Ferguson, Hari P. Nair, Nathaniel J. Schreiber, Ludi Miao, Kyle M. Shen, Darrell G. Schlom, and Katja C. Nowack

(Continued)

The editors and referees of PRB find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. B 77, 130001 (2008).

PHYSICAL REVIEW B **THIRD SERIES, VOLUME 110, NUMBER 14** **OCTOBER 2024-1(II)**

Coexistence of ferromagnetism and cluster glass behavior in Ce_5CoGe_2 *(8 pages)* 144432
Dajun Su, Jiawen Zhang, Yongjun Zhang, Zhaoyang Shan, Yanan Zhang, Michael Smidman, Lin Jiao, Yu Liu, and Huiqiu Yuan

Theoretical study of ultrafast spin dynamics in a Co-Fe molecular Prussian blue analog and spin logic functionality design *(14 pages)* 144433
Shangjie Ma, Yan Wu, Shuai Xu, Yiming Zhang, Jing Liu, Chun Li, Georgios Lefkidis, Wolfgang Hübner, and Wei Jin

Magnetic and crystal electric field studies of the rare earth based square lattice antiferromagnet $NdKNaNbO_5$ *(13 pages)* 144434
S. Guchhait, A. Painganoor, S. S. Islam, J. Sichelschmidt, M. D. Le, N. B. Christensen, and R. Nath

Quasistatic magnetism in the breathing pyrochlore antiferromagnets $LiGa_{1-x}In_xCr_4O_8$ ($x = 0.2, 0.5$) *(8 pages)* . . . 144435
W. Lee, S. Yoon, Y.-S. Choi, S.-H. Do, A. N. Ponomaryov, S. A. Zvyagin, D. Gorbunov, J. Wosnitza, A. Koda, W.-T. Chen, K.-Y. Choi, and S. Lee

First-principles investigation of the impact of spin-orbit coupling Hamiltonians on the spin transport properties of Fe|MgO|Fe magnetic tunnel junctions *(7 pages)* 144436
Hui-Min Tang and Xingtao Jia

Algebraic spin liquid in the SU(6) Heisenberg model on the kagome lattice *(29 pages)* 144437
Dániel Vörös, Péter Kránitz, and Karlo Penc

Theory for the spin Seebeck effect in the spin-flop phase of the Heisenberg antiferromagnet $RbMnF_3$ *(11 pages)* 144438
J. D. M. de Lima, E. C. Souza, and S. M. Rezende

Role of stacking defects on the magnetic behavior of $CrCl_3$ *(8 pages)* 144439
John A. Schneeloch, Adam A. Aczel, Feng Ye, and Despina Louca

Curie-Weiss behavior and the interaction temperature of magnetic nanoparticle ensembles: Local structure strongly affects the magnetic behavior *(11 pages)* 144440
Robert E. Camley, Rair Macêdo, and Karen L. Livesey

Oxygen-tuned exchange interaction by boosting uncompensated magnetic moments in ferromagnet/antiferromagnet interfaces *(10 pages)* 144441
Ronggui Zhu, Chenchen Shi, Rui Li, Lei Ding, Tong Guo, Fei Meng, Boyi Wang, Yu Qi, Yi Cao, Wenbo Mi, Chun Feng, and Guanghua Yu

Large dynamical magnetic effective charges and antimagnetoelectricity from spin and orbital origin in multiferroic $BiCoO_3$ *(14 pages)* 144442
Maxime Braun, Bogdan Guster, Andrea Urru, Houria Kabbour, and Eric Bousquet

Transition between amplitude-modulated and ferrimagnetic states in $Ca_3Co_2O_6$ *(7 pages)* 144443
Vincent Hardy, Martin R. Lees, and Oleg A. Petrenko

Floquet formalism for tunable optically induced orbital magnetization in twisted bilayers *(11 pages)* 144444
Jinxuan Dong, Zuzhang Lin, Bing-Lin Gu, and Wenhui Duan

Large magnetocaloric effect in the Shastry-Sutherland lattice compound $Yb_2Be_2GeO_7$ with spin-disordered ground state *(13 pages)* 144445
Andi Liu, Jin Zhou, Lei Wang, Yantao Cao, Fangyuan Song, Yuyan Han, Jingxin Li, Wei Tong, Zhengcai Xia, Zhongwen Ouyang, Jinkui Zhao, Hanjie Guo, and Zhaoming Tian

(Continued)

The editors and referees of PRB find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. B 77, 130001 (2008).

PHYSICAL REVIEW B **THIRD SERIES, VOLUME 110, NUMBER 14** **OCTOBER 2024-1(II)**

Quantum spin liquids in weak Mott insulators with spin-orbit coupling *(18 pages)* 144418
Asimpunya Mitra, Daniel J. Schultz, and Yong Baek Kim

Pressure induced Invar effect in $Fe_{55}Ni_{45}$: An experimental study with nuclear resonant scattering *(8 pages)* 144419
P. Guzman, S. H. Lohaus, C. M. Bernal-Choban, B. Fultz, J. Y. Zhao, G. Shen, M. Y. Hu, E. E. Alp, and B. Lavina

Itinerant *A*-type antiferromagnetic order in $Co_{1/4}TaSe_2$ *(12 pages)* 144420
H. Cein Mandujano, Gicela Saucedo Salas, Tianyu Li, Peter Y. Zavalij, Alicia Manjón-Sanz, Nicholas P. Butch, and Efrain E. Rodriguez

Fluctuation-induced piezomagnetism in local moment altermagnets *(11 pages)* 144421
Kostiantyn V. Yershov, Volodymyr P. Kravchuk, Maria Daghofer, and Jeroen van den Brink

Anisotropic spin glass behavior of the quasi-two-dimensional buckled honeycomb compound $Mg_2Ni_2Ta_2O_9$ *(10 pages)* 144422
Xunqing Yin, Chenhang Xu, Qi Lu, Jiaxin Li, Rong Feng, Feng Liu, Zhihua Liu, Bo Zhang, Cong Chen, Lingyan Chen, Sheng Huang, Jinlong Jiao, Binru Zhao, Jiawang Zhao, Yiming Cao, Guohua Wang, Jie Ma, and Dong Qian

Gapless spin liquid behavior in the organic Mott insulator κ-$(BEDT\text{-}TTF)_2Cu[Au(CN)_2]Cl$ with ordered anions *(8 pages)* 144423
Yuki Tanaka, Shinya Tomeno, Yukihiro Yoshida, Yasuhiro Shimizu, Hiroshi Kitagawa, and Mitsuhiko Maesato

Long-distance entanglement via magnon-induced Brillouin light scattering *(11 pages)* 144424
Nan Wang, Shi-Yan Li, Lin Yu, and Ai-Dong Zhu

Magnetic and viscous dynamics of spheroidal nanoparticles *(15 pages)* 144425
Frederik L. Durhuus, Marco Beleggia, and Cathrine Frandsen

Emergent elasticity and wavelike to particle-like crossover in a magnetic chiral soliton lattice *(15 pages)* 144426
A. A. Tereshchenko, Vl. E. Sinitsyn, I. G. Bostrem, P. V. Prudnikov, A. S. Ovchinnikov, and J. Kishine

Multiscale approach for modeling magnetization properties of inhomogeneous ultrathin magnetic layers *(19 pages)* 144427
Julien Mordret, Jean-Christophe Le Breton, Gabriel Delhaye, Bruno Lépine, Philippe Schieffer, and Sylvain Tricot

Spin-wave Goos-Hänchen effect induced by 360-degree domain walls in magnetic heterostructures *(10 pages)* . . . 144428
Mei Li, Bin Xi, Yongjun Liu, and Jie Lu

Characterizing the diffuse continuum excitations in the classical spin liquid *h*-$YMnO_3$ *(15 pages)* 144429
Jakob Lass, Emma Y. Lenander, Kristine M. L. Krighaar, Tara N. Tošić, Dharmalingam Prabhakaran, Pascale P. Deen, Sofie Holm-Janas, and Kim Lefmann

Antiferromagnetic standing spin waves generated in NiO thin films by short strain pulses *(10 pages)* 144430
Andrei V. Azovtsev and Nikolay A. Pertsev

Out-of-plane magnetic phase diagram of the Kitaev quantum magnet $Na_2Co_2TeO_6$ *(8 pages)* 144431
Shengzhi Zhang, Sangyun Lee, Eric Brosha, Qing Huang, Haidong Zhou, Vivien S. Zapf, and Minseong Lee

(Continued)

The editors and referees of PRB find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. B 77, 130001 (2008).

PHYSICAL REVIEW B **THIRD SERIES, VOLUME 110, NUMBER 14** **OCTOBER 2024-1(II)**

Influence of flat bands on RKKY interaction: Perspective of Fano defects *(9 pages)* 144402
Yue-De Luo and Min-Fong Yang

Pressure-driven enhancement of antiferromagnetic order in DySbTe single crystals *(8 pages)* 144403
Xiangqi Wang, Yong Jia, Xiaoping Song, and Jun Tan

Inducing out-of-plane magnetic anisotropy by chemical substitutions in the multiferroic $CuCrP_2S_6$ monolayer *(8 pages)* 144404
Anita Yadav, Nataša Stojić, and Nadia Binggeli

Anomalous Hall and Nernst effects in the half-metallic ferromagnet Gd_4Sb_3 *(10 pages)* 144405
Yuyang Han, Chaoxin Qiu, Wei Ren, Yimai Wu, Liting Jiang, Xiaohua Luo, Changcai Chen, Chunsheng Fang, and Shengcan Ma

Ferromagnetic resonance in three-dimensional tilted-square artificial spin ices *(9 pages)* 144406
Ghanem Alatteili, Alison Roxburgh, and Ezio Iacocca

Accounting for all contributions to Van Vleck paramagnetism and Langevin diamagnetism from first principles: Application to diamond *(12 pages)* 144407
A. V. Nikolaev, I. I. Vlasov, and L. L. Tao

Strain-induced intrinsic antiferromagnetic skyrmions in two-dimensional Janus magnets *(9 pages)* 144408
Weiyi Pan, Shilei Ji, and Zhiming Xu

Stabilization of biskyrmions by chiral interaction in centrosymmetric magnets *(6 pages)* 144409
Deepak S. Kathyat and Pinaki Sengupta

Ab initio study of quantum oscillations in altermagnetic and nonmagnetic phases of RuO_2 *(8 pages)* 144410
Yingliang Huang, Junwen Lai, Jie Zhan, Tianye Yu, Rong Chen, Peitao Liu, Xing-Qiu Chen, and Yan Sun

Canted antiferromagnetic order in the centrosymmetric honeycomb-lattice compound $NdPt_6Al_3$ *(10 pages)* 144411
R. Oishi, C. Ritter, M. M. Koza, D. T. Adroja, T. Onimaru, Y. Shimura, K. Umeo, and T. Takabatake

Minimal models for altermagnetism *(20 pages)* 144412
Mercè Roig, Andreas Kreisel, Yue Yu, Brian M. Andersen, and Daniel F. Agterberg

Influence of magnon renormalization and interband coupling on the spin Seebeck effect in YIG *(13 pages)* 144413
Yuling Yin, Yang Liu, Yiqun Liu, and Xiangang Wan

Ab initio study of magnetic phase transition and electronic properties of $CeFe_2$ under high pressure *(9 pages)* 144414
Yiyuan Wang and Ji Feng

Near-room-temperature ferrimagnetism and half-metallicity in disordered $Ca_{1.5}La_{0.5}MnRuO_6$ *(12 pages)* 144415
A. G. Silva, R. B. Pontes, M. Boldrin, H. V. S. Pessoni, L. S. I. Veiga, J. R. Jesus, H. Fabrelli, A. R. C. Gonzaga, E. M. Bittar, and L. Bufaiçal

Recursive algorithm for generating high-temperature expansions for spin systems and the chiral nonlinear susceptibility *(18 pages)* 144416
Andreas Rückriegel, Dmytro Tarasevych, Jan Krieg, and Peter Kopietz

Peculiar RKKY behavior involving electron transfer effect in sp^3 semi-ionic F-doped graphene metal *(7 pages)* 144417
Shuilin Li, Hongzhe Pan, Jiawei Liu, Ziying Li, and Nujiang Tang

(Continued)

The editors and referees of PRB find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. B 77, 130001 (2008).

PHYSICAL REVIEW B **THIRD SERIES, VOLUME 110, NUMBER 14** **OCTOBER 2024-1(II)**

Ice on curved surfaces: Defect rings and differential local dynamics *(8 pages)* 144202
Adhitya Sivaramakrishnan and R. Ganesh

Conductivity scaling and absence of localization in disordered nodal-line semimetals *(10 pages)* 144203
Carolina Paiva and Jan Behrends

Diagnosing quantum transport from wave function snapshots *(12 pages)* 144204
Devendra Singh Bhakuni, Roberto Verdel, Cristiano Muzzi, Riccardo Andreoni, Monika Aidelsburger, and Marcello Dalmonte

Exact complex mobility edges and flagellate-like spectra for non-Hermitian quasicrystals with exponential hoppings *(8 pages)* 144205
Li Wang, Jiaqi Liu, Zhenbo Wang, and Shu Chen

Dynamics, dynamical systems, lattice effects:

Faster entanglement driven by quantum resonance in many-body kicked rotors *(6 pages)* 144301
Sanku Paul, J. Bharathi Kannan, and M. S. Santhanam

Quantum many-body scars from unstable periodic orbits *(15 pages)* 144302
Bertrand Evrard, Andrea Pizzi, Simeon I. Mistakidis, and Ceren B. Dag

Infrared-induced ultrafast melting of nanostructured platinum films probed by an x-ray free-electron laser *(10 pages)* 144303
Luca Gelisio, Young Yong Kim, Seon Woo Lim, Daewoong Nam, Intae Eom, Minseok Kim, Sangsoo Kim, Ruslan Khubbutdinov, Li Xiang, Hoyeol Lee, Moonhor Ree, Chae Un Kim, and Ivan A. Vartanyants

Complete inverse design to customize two-dimensional dispersion relation via nonlocal phononic crystals *(10 pages)* 144304
Sharat Paul, Md Nahid Hasan, Henry Chien Fu, and Pai Wang

Delocalization of skin steady states *(10 pages)* 144305
Xu Feng and Shu Chen

Entanglement entropy of free fermions in timelike slices *(11 pages)* 144306
Bowei Liu, Hao Chen, and Biao Lian

Spin relaxation in graphite due to spin-orbit–phonon interaction from a first-principles density matrix approach *(9 pages)* 144307
Junqing Xu

Random matrix approach to time-dependent forcing in many-body quantum systems *(15 pages)* 144308
Lennart Dabelow and Peter Reimann

Finite-size generators for weak integrability breaking perturbations in the Heisenberg chain *(25 pages)* 144309
Sara Vanovac, Federica Maria Surace, and Olexei I. Motrunich

Ultrahigh hydrogen diffusivities in Al_2O_3 under high pressure *(11 pages)* 144310
Yuanqin Zhu, Leiming Fang, Zhi Zeng, and Xianlong Wang

Magnetism

Probing universal critical scaling with scan density matrix renormalization group *(11 pages)* 144401
Natalia Chepiga

(Continued)

The editors and referees of PRB find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. B 77, 130001 (2008).

PHYSICAL REVIEW B THIRD SERIES, VOLUME 110, NUMBER 14 OCTOBER 2024-1(II)

ARTICLES

Structure, structural phase transitions, mechanical properties, defects

Beyond Gaussian fluctuations of quantum anharmonic nuclei: The case of rotational degrees of freedom *(18 pages)* 144101
Antonio Siciliano, Lorenzo Monacelli, and Francesco Mauri

Analytical derivation and extension of the anti-Kibble-Zurek scaling in the transverse field Ising model *(16 pages)* 144102
Kaito Iwamura and Takayuki Suzuki

Structural, ferroelectric, and electronic transitions in the van der Waals multiferroic material $CuCrP_2S_6$ under high temperature and high pressure *(13 pages)* 144103
Meiling Hong, Lidong Dai, Haiying Hu, and Chuang Li

Thermodynamic integration by statistically sampling ensembles of dynamically unstable solids without molecular dynamics *(11 pages)* 144104
Junsoo Park, Zhigang Wu, and John W. Lawson

Role of microscopic coherent force and hot-carrier cooling in photoinduced phase transition for chalcogenide phase-change materials *(12 pages)* 144105
Li Chen (陈立), Liyuan Chen (陈丽媛), Hongli Chen (陈红丽), Yawei Li (李亚巍), Liyan Shang (商丽燕), Liangqing Zhu (朱亮清), Jinzhong Zhang (张金中), Shijing Gong (龚士静), and Zhigao Hu (胡志高)

Higher-dimensional geometrical approach for the characterization of two-dimensional square-triangle-rhombus tilings *(13 pages)* 144106
Marianne Imperor-Clerc, Pavel Kalugin, Sebastian Schenk, Wolf Widdra, and Stefan Förster

Phonon localization and dissipation in polymer-like disordered systems *(11 pages)* 144107
Louis Milhamont, Zhiting Tian, Samer Awale, and Yann Chalopin

First-principles description of solid oxygen in the gigapascal pressure scale using the DFT+vdW+U approach *(16 pages)* 144108
M.-B. Attaiaa, M. Micoulaut, S. Klotz, and S. Scandolo

Effect of strain on the band gap of monolayer MoS_2 *(7 pages)* 144109
Raj K. Sah, Hong Tang, Chandra Shahi, Adrienn Ruzsinszky, and John P. Perdew

Laser-driven shock compression and equation of state of Fe_2O_3 up to 700 GPa *(7 pages)* 144110
Alexis Amouretti, Marion Harmand, Bruno Albertazzi, Antoine Boury, Alessandra Benuzzi-Mounaix, D. Alex Chin, François Guyot, Michel Koenig, Tommaso Vinci, and Guillaume Fiquet

$\{10\bar{1}4\}$ twin boundary in calcite: Structure and physical properties *(15 pages)* 144112
Yang Yang, Yixin Lin, Xiangdong Ding, Jun Sun, Nicholas J. Butterfield, Julie Aufort, and Ekhard K. H. Salje

Quasihexagonal arrays of electric-skyrmion bubbles in thin-film ferroelectrics: Pattern formation and structure *(7 pages)* 144113
Maxim A. Makeev, Suyash Rijal, Sergei Prokhorenko, Yousra Nahas, and Laurent Bellaiche

Inhomogeneous, disordered, and partially ordered systems

Superdiffusive transport on lattices with nodal impurities *(6 pages)* 144201
Yu-Peng Wang, Jie Ren, and Chen Fang

(Continued)

The editors and referees of PRB find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. B 77, 130001 (2008).

PHYSICAL REVIEW B **THIRD SERIES, VOLUME 110, NUMBER 14** **OCTOBER 2024-1(II)**

Diversity of ultrafast spin dynamics near the tricritical point in a ferrimagnetic Gd/FeCo multilayer *(6 pages)*. . . . L140404
T. G. H. Blank, B. D. Muis, T. Lichtenberg, B. Koopmans, and A. V. Kimel

Controlling orbital magnetism of band electron systems via bath engineering *(5 pages)* L140405
Subrata Chakraborty and So Takei

Ultrafast magnetostructural dynamics of MnAs *(6 pages)* L140406
F. Vidal, Y. Zheng, E. Ferrari, E. Allaria, C. Spezzani, C. Laulhé, H. Popescu, P. Atkinson, N. Casaretto, M. Eddrief, H. Wang, J. Zhao, M. Seaberg, R. Alonso-Mori, J. M. Glownia, M. Chollet, H. Xu, X. Huang, F. Lima, D. Khakhulin, I. J. Bermudez Macias, D. Vinci, M. Biednov, Y. Jiang, Y. Uemura, F. Ardana-Lamas, P. Zalden, C. Milne, and M. Sacchi

Intermediate field-induced phase of the honeycomb magnet $BaCo_2(AsO_4)_2$ *(6 pages)*. L140407
Prashanta K. Mukharjee, Bin Shen, Sebastian Erdmann, Anton Jesche, Julian Kaiser, Priya R. Baral, Oksana Zaharko, Philipp Gegenwart, and Alexander A. Tsirlin

Magnon kinetic theory of the antiferromagnetic Hanle effect *(6 pages)* L140408
Eric Kleinherbers and Yaroslav Tserkovnyak

Magnetic triple Weyl semimetals that are robust against spin-orbit coupling *(7 pages)* L140409
Guang Liu, Peiyao Qin, Jun Ren, Zhongjia Chen, Guanghui Zhou, and Hu Xu

Superfluidity and superconductivity

Superconducting diode effect in diffusive superconductors and Josephson junctions with Rashba spin-orbit coupling *(6 pages)* L140501
Stefan Ilić, Pauli Virtanen, Daniel Crawford, Tero T. Heikkilä, and F. Sebastián Bergeret

NbTi: A nontrivial puzzle for the conventional theory of superconductivity *(6 pages)* L140502
Alessio Cucciari, Dionisia Naddeo, Simone Di Cataldo, and Lilia Boeri

Interaction-induced dissipative quantum phase transition in a head-to-tail atomic Josephson junction *(6 pages)*. . . L140503
Koichiro Furutani and Luca Salasnich

Correlation-induced Fermi surface evolution and topological crystalline superconductivity in $CeRh_2As_2$ *(8 pages)*. L140505
Jun Ishizuka, Kosuke Nogaki, Manfred Sigrist, and Youichi Yanase

Quasiclassical theory of superconducting spin-splitter effects and spin-filtering via altermagnets *(6 pages)*. L140506
Hans Gløckner Giil, Bjørnulf Brekke, Jacob Linder, and Arne Brataas

Growth and characterization of high-quality FeSe thin films on $SrTiO_3$ with enhanced superconductivity *(8 pages)* L140507
Zhanyi Zhao, Zhongxu Wei, Xiaodong Yu, Wenfeng Dong, Jierui Huang, Congrun Chen, Zhongpei Feng, Mingyang Qin, Xuewei Wang, Shenggen Cao, Qing Huan, Yangmu Li, Jie Yuan, Beiyi Zhu, Qihong Chen, Yujie Sun, Lili Wang, Tian Qian, and Kui Jin

Nature of charge density waves and metal-insulator transition in pressurized $La_3Ni_2O_7$ *(9 pages)*. L140508
Xin-Wei Yi, Ying Meng, Jia-Wen Li, Zheng-Wei Liao, Wei Li, Jing-Yang You, Bo Gu, and Gang Su

(Continued)

The editors and referees of PRB find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. B 77, 130001 (2008).

PHYSICAL REVIEW B™

For editorial and subscription correspondence, please see inside front cover
(ISSN: 2469-9950)

PERIODICALS
Postmaster send address changes to:

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

THIRD SERIES, VOLUME 110, NUMBER 14 ***CONTENTS*** **OCTOBER 2024-1(II)**

LETTERS

Structure, structural phase transitions, mechanical properties, defects

Ab initio elasticity at finite temperature and stress in ferroelectrics *(7 pages)* L140101
Mark A. Mathis and Chris A. Marianetti

Inhomogeneous, disordered, and partially ordered systems

Orbital Hall responses in disordered topological materials *(6 pages)* L140201
Luis M. Canonico, Jose H. Garcia, and Stephan Roche

Inverse renormalization group of spin glasses *(6 pages)* L140202
Dimitrios Bachtis

Dynamics, dynamical systems, lattice effects:

Measurement-induced phase transitions in systems with diffusive dynamics *(6 pages)* L140301
Hyunsoo Ha, Akshat Pandey, Sarang Gopalakrishnan, and David A. Huse

Abnormal frequency response determined by saddle points in non-Hermitian crystals *(6 pages)* L140302
Kunling Zhou, Jun Zhao, Bowen Zeng, and Yong Hu

Anisotropy in a wire medium resulting from the rectangularity of a unit cell *(5 pages)* L140303
Denis Sakhno, Rustam Balafendiev, and Pavel A. Belov

Frustrated Ising charge correlations in the kagome metal ScV_6Sn_6 *(6 pages)* L140304
S. J. Gomez Alvarado, G. Pokharel, B. R. Ortiz, Joseph A. M. Paddison, Suchismita Sarker, J. P. C. Ruff, and Stephen D. Wilson

Tracking intrinsic non-Hermitian skin effects in lossy lattices *(6 pages)* L140305
Liwei Xiong, Qicheng Zhang, Xiling Feng, Yufei Leng, Min Pi, Shuaishuai Tong, and Chunyin Qiu

Magnetism

Spin dynamics and possible topological magnons in the nonstoichiometric pyrochlore iridate $Tb_2Ir_2O_7$ studied by RIXS *(6 pages)* L140401
Q. Faure, A. Toschi, J. R. Soh, E. Lhotel, B. Detlefs, D. Prabhakaran, D. F. McMorrow, and Ch. J. Sahle

Signatures of a quantum critical endpoint in the Kitaev candidate $Na_2Co_2TeO_6$ *(6 pages)* L140402
J. Arneth, K.-Y. Choi, R. Kalaivanan, R. Sankar, and R. Klingeler

Quantum spin systems: Toroidal classification and geometric duality *(7 pages)* L140403
Vahid Azimi-Mousolou, Anders Bergman, Anna Delin, Olle Eriksson, Manuel Pereiro, Danny Thonig, and Erik Sjöqvist

(Continued)

2469-9950(20241001)110:14;1-U

The editors and referees of PRB find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. B 77, 130001 (2008).