

Dynamical quantum Hall effect in the parameter space

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Microscopic theory of non-adiabatic response in real and imaginary time. Journal of Physics Condensed Matter, 2013, 25, 404216.	0.7	18
2	Measuring Berry curvature with quantum Monte Carlo. Physical Review B, 2014, 89, .	1.1	9
3	Emergent Newtonian dynamics and the geometric origin of mass. Annals of Physics, 2014, 345, 141-165.	1.0	10
4	Nonadiabatic dynamics of a slowly driven dissipative two-level system. Physical Review A, 2014, 89, .	1.0	31
5	Magnetic fields without magnetic fields. Nature, 2014, 515, 202-203.	13.7	2
6	Observation of topological transitions in interacting quantum circuits. Nature, 2014, 515, 241-244.	13.7	162
7	Measuring a Topological Transition in an Artificial Spin- $1/2$ System. Physical Review Letters, 2014, 113, 050402.	2.9	118
8	Simulating the dynamical quantum Hall effect with superconducting qubits. Physical Review A, 2015, 91, .	1.0	7
9	Enabling adiabatic passages between disjoint regions in parameter space through topological transitions. Physical Review B, 2016, 94, .	1.1	3
10	Many-body quantum electrodynamics networks: Non-equilibrium condensed matter physics with light. Comptes Rendus Physique, 2016, 17, 808-835.	0.3	82
11	Direct Measurement of Topological Numbers with Spins in Diamond. Physical Review Letters, 2016, 117, 060503.	2.9	32
12	Experimental observation of topological transitions in interacting multispin systems. Physical Review A, 2016, 93, .	1.0	11
13	Quantum Hall effect in momentum space. Physical Review B, 2016, 93, .	1.1	8
14	Measuring the Second Chern Number from Nonadiabatic Effects. Physical Review Letters, 2016, 117, 015301.	2.9	22
15	Geometry and Response of Lindbladians. Physical Review X, 2016, 6, .	2.8	94
16	Simulation of the many-body dynamical quantum Hall effect in an optical lattice. Quantum Information Processing, 2016, 15, 1909-1920.	1.0	1
17	Topology of a dissipative spin: Dynamical Chern number, bath-induced nonadiabaticity, and a quantum dynamo effect. Physical Review B, 2017, 95, .	1.1	12
18	Quantum simulation of gravitational-like waves in minisuperspace with an artificial qubit. Physical Review D, 2017, 95, .	1.6	3

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19	Adiabatic perturbation theory and geometry of periodically-driven systems. <i>Physics Reports</i> , 2017, 688, 1-35.	10.3	82
20	Quantum simulation of Abelian Wu–Yang monopoles in spin-1/2 systems. <i>Laser Physics Letters</i> , 2017, 14, 045205.	0.6	1
21	Quantum systems under frequency modulation. <i>Reports on Progress in Physics</i> , 2017, 80, 056002.	8.1	117
22	Topological Andreev bands in three-terminal Josephson junctions. <i>Physical Review B</i> , 2017, 96, .	1.1	56
23	Geometry and non-adiabatic response in quantum and classical systems. <i>Physics Reports</i> , 2017, 697, 1-87.	10.3	178
24	Adiabatic Theorem for Quantum Spin Systems. <i>Physical Review Letters</i> , 2017, 119, 060201.	2.9	45
25	Realizing and manipulating space-time inversion symmetric topological semimetal bands with superconducting quantum circuits. <i>Npj Quantum Materials</i> , 2017, 2, .	1.8	20
26	Majorana spin liquids, topology, and superconductivity in ladders. <i>Physical Review B</i> , 2017, 96, .	1.1	14
27	Dispersive Readout of Adiabatic Phases. <i>Physical Review Letters</i> , 2017, 119, 196802.	2.9	16
28	Measurement of the topological Chern number by continuous probing of a qubit subject to a slowly varying Hamiltonian. <i>Physical Review A</i> , 2017, 96, .	1.0	7
29	Fast adiabatic method for measuring topological Chern number. <i>Science China: Physics, Mechanics and Astronomy</i> , 2018, 61, 1.	2.0	1
30	Topological Maxwell Metal Bands in a Superconducting Qutrit. <i>Physical Review Letters</i> , 2018, 120, 130503.	2.9	87
31	Experimental Observation of a Generalized Thouless Pump with a Single Spin. <i>Physical Review Letters</i> , 2018, 120, 120501.	2.9	59
32	Steering random spin systems to speed up the quantum adiabatic algorithm. <i>Physical Review A</i> , 2018, 98, .	1.0	20
33	Continuously tunable topological pump in high-dimensional cold atomic gases. <i>Physical Review B</i> , 2018, 98, .	1.1	10
34	Second Chern number of a quantum-simulated non-Abelian Yang monopole. <i>Science</i> , 2018, 360, 1429-1434.	6.0	96
35	Spin-1 topological monopoles in the parameter space of ultracold atoms. <i>Physical Review A</i> , 2018, 98, .	1.0	14
36	Driven dissipative dynamics and topology of quantum impurity systems. <i>Comptes Rendus Physique</i> , 2018, 19, 451-483.	0.3	31

#	ARTICLE	IF	CITATIONS
37	Yang Monopoles and Emergent Three-Dimensional Topological Defects in Interacting Bosons. <i>Physical Review Letters</i> , 2018, 120, 235302.	2.9	3
38	Dissipative dynamics of a driven qubit: Interplay between nonadiabatic dynamics and noise effects from the weak to strong coupling regime. <i>Physical Review B</i> , 2019, 100, .	1.1	6
39	Observation of spin-orbit coupling induced Weyl points in a two-electron double quantum dot. <i>Communications Physics</i> , 2019, 2, .	2.0	11
40	Experimental Measurement of the Quantum Metric Tensor and Related Topological Phase Transition with a Superconducting Qubit. <i>Physical Review Letters</i> , 2019, 122, 210401.	2.9	74
41	Visualizing the connection between edge states and the mobility edge in adiabatic and nonadiabatic topological charge transport. <i>Physical Review B</i> , 2019, 99, .	1.1	2
42	Simulation and Manipulation of Tunable Weyl-Semimetal Bands Using Superconducting Quantum Circuits. <i>Physical Review Letters</i> , 2019, 122, 010501.	2.9	28
43	Experimental measurement of the quantum geometric tensor using coupled qubits in diamond. <i>National Science Review</i> , 2020, 7, 254-260.	4.6	59
44	Geometric Control of Collective Spontaneous Emission. <i>Physical Review Letters</i> , 2020, 125, 213602.	2.9	31
45	Integration of the Berry curvature on a qubit state manifold by coupling to a quantum meter system. <i>Physical Review A</i> , 2020, 102, .	1.0	1
46	Magnetic degeneracy points in interacting two-spin systems: Geometrical patterns, topological charge distributions, and their stability. <i>Physical Review B</i> , 2020, 101, .	1.1	5
47	Noncyclic geometric quantum computation with shortcut to adiabaticity. <i>Physical Review A</i> , 2020, 101, .	1.0	15
48	Berry phase estimation in gate-based adiabatic quantum simulation. <i>Physical Review A</i> , 2020, 101, .	1.0	10
49	Response of a quantum disordered spin system to a local periodic drive. <i>Physical Review B</i> , 2020, 101, .	1.1	3
50	Non-adiabatic Response and Counterdiabatic Driving of Coherent States. <i>International Journal of Theoretical Physics</i> , 2021, 60, 944-953.	0.5	0
51	Weyl Josephson circuits. <i>Physical Review Research</i> , 2021, 3, .	1.3	34
52	Transconductance quantization in a topological Josephson tunnel junction circuit. <i>Physical Review Research</i> , 2021, 3, .	1.3	20
53	Tracking quantum state evolution by the Berry curvature with a two-level system. <i>European Physical Journal Plus</i> , 2021, 136, 1.	1.2	1
54	Quantum entangled fractional topology and curvatures. <i>Communications Physics</i> , 2021, 4, .	2.0	8

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55	Measurement of Spin Chern Numbers in Quantum Simulated Topological Insulators. <i>Physical Review Letters</i> , 2021, 127, 136802.	2.9	15
56	Counterdiabatic control of transport in a synthetic tight-binding lattice. <i>Physical Review Research</i> , 2020, 2, .	1.3	7
57	Atomic spin-wave control and spin-dependent kicks with shaped subnanosecond pulses. <i>Physical Review Research</i> , 2020, 2, .	1.3	10
58	Solving the Measurement Problem and then Steppinâ€™ Out over the Line Riding the Rarest Italian: Crossing the Streams to Retrieve Stable Bioactivity in Majorana Bound States of Dialy zed Human Platelet Lysates. <i>The Open Neurology Journal</i> , 2015, 9, 32-44.	0.4	0
59	Topological quantum material simulated with superconducting quantum circuits. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2018, 67, 220302.	0.2	3
60	Topological charge distributions of an interacting two-spin system. <i>Physical Review B</i> , 2022, 105, .	1.1	0
61	Topological power pumping in quantum circuits. <i>Physical Review Research</i> , 2022, 4, .	1.3	1
62	Majoranaâ€™s stellar representation for the quantum geometric tensor of symmetric states. <i>Communications in Theoretical Physics</i> , 0, , .	1.1	0
63	Measurement of interaction-dressed Berry curvature and quantum metric in solids by optical absorption. <i>SciPost Physics Core</i> , 2022, 5, .	0.9	5
64	Topological burning glass effect. <i>Physical Review B</i> , 2022, 106, .	1.1	1
65	Topological phases in interacting spin-1 systems. <i>Physical Review B</i> , 2022, 106, .	1.1	0
66	Floquet band engineering with Bloch oscillations. <i>Physical Review B</i> , 2022, 106, .	1.1	6
67	Energy dynamics, heat production and heatâ€™work conversion with qubits: toward the development of quantum machines. <i>Reports on Progress in Physics</i> , 2023, 86, 036501.	8.1	17
68	Direct measurement of quantum Fisher information. <i>Physical Review A</i> , 2023, 107, .	1.0	7
69	Topologically protected quantum dynamo effect in a driven spin-boson model. <i>Physical Review A</i> , 2023, 107, .	1.0	1
70	Scheme for Measuring Topological Transitions in a Continuous Variable System. <i>Advanced Quantum Technologies</i> , 2023, 6, .	1.8	1