

Landau-Level Mixing and the Emergence of Pfaffian Excitations
$$\nu = 5$$
Quantum Hall Effect

Physical Review Letters

105, 096802

DOI: 10.1103/physrevlett.105.096802

Citation Report

#	ARTICLE	IF	CITATIONS
1	Fractional quantum Hall effects in bilayers in the presence of interlayer tunneling and charge imbalance. Physical Review B, 2010, 82, .	1.1	26
2	Global Phase Diagram of the Fractional Quantum Hall Effect Arising from Repulsive Three-Body Interactions. Physical Review Letters, 2010, 105, 196801.	2.9	15
3	Landau level quantization on the sphere. Physical Review B, 2011, 83, .	1.1	36
4	Search for non-Abelian statistics in half-filled Landau levels of graphene. Journal of Physics: Conference Series, 2011, 334, 012048.	0.3	2
5	Entanglement measures for quasi-two-dimensional fractional quantum Hall states. Physical Review B, 2011, 84, .	1.1	14
6	Rapid Collapse of Spin Waves in Nonuniform Phases of the Second Landau Level. Physical Review Letters, 2011, 106, 196805.	2.9	46
7	Tunable interactions and phase transitions in Dirac materials in a magnetic field. Physical Review B, 2011, 84, .	1.1	35
8	Quantum Hall effects in fast-rotating Fermi gases with anisotropic dipolar interaction. Physical Review A, 2011, 83, .	1.0	25
9	Bipartite Composite Fermion States. Physical Review Letters, 2011, 107, 086806.	2.9	36
10	Particle-hole asymmetry of fractional quantum Hall states in the second Landau level of a two-dimensional hole system. Physical Review B, 2011, 83, .	1.1	7
11	Non-Fermi-liquid quantum impurity physics from non-Abelian quantum Hall states. Physical Review B, 2011, 84, .	1.1	2
12	Impact of Disorder on the $5/2$ Fractional Quantum Hall State. Physical Review Letters, 2011, 106, 206806.	2.9	55
13	Anomalous Robustness of the $\nu = 5/2$ Fractional Quantum Hall State near a Sharp Phase Boundary. Physical Review Letters, 2011, 107, 176805.	2.9	28
14	Evolution of the $\nu = 7/2$ Fractional Quantum Hall State in Two-Subband Systems. Physical Review Letters, 2011, 107, 266802.	2.9	19
15	Quantitative analysis of the disorder broadening and the intrinsic gap for the $\nu = 5/2$ fractional quantum Hall state. Physical Review B, 2011, 84, .	1.1	38
16	Numerical Calculation of the Neutral Fermion Gap at the $\nu = 5/2$ Fractional Quantum Hall State. Physical Review Letters, 2011, 106, 186802.	2.9	32
17	Neutral Fermion Excitations in the Moore-Read State at Filling Factor $\nu = 5/2$. Physical Review Letters, 2011, 107, 036803.	2.9	40
18	Tunable Electron Interactions and Fractional Quantum Hall States in Graphene. Physical Review Letters, 2011, 107, 176602.	2.9	31

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19	Stable Pfaffian State in Bilayer Graphene. Physical Review Letters, 2011, 107, 186803.	2.9	62
20	Enhancement of the $\nu = 1/2$ Quantum Hall State in a Small In-Plane Magnetic Field. Physical Review Letters, 2012, 108, 196805.	2.9	21
21	Collective Nature of the Reentrant Integer Quantum Hall States in the Second Landau Level. Physical Review Letters, 2012, 108, 086803.	2.9	49
22	Contrasting energy scales of reentrant integer quantum Hall states. Physical Review B, 2012, 86, .	1.1	42
23	The fractional quantum Hall effect at filling factor 5/2: numerically searching for non-abelian anyons. Journal of Physics: Conference Series, 2012, 402, 012021.	0.3	3
24	Numerical studies of the fractional quantum Hall effect in systems with tunable interactions. Journal of Physics: Conference Series, 2012, 402, 012020.	0.3	2
25	Possible Anti-Pfaffian Pairing of Composite Fermions at $\nu = 3/8$. Physical Review Letters, 2012, 109, 256801.	2.9	28
26	Quantum Phase Transitions and the Fractional Quantum Hall State in Wide Quantum Wells. Physical Review Letters, 2012, 109, 266806.	2.9	32
27	Band mass anisotropy and the intrinsic metric of fractional quantum Hall systems. Physical Review B, 2012, 85, .	1.1	87
28	More realistic Hamiltonians for the fractional quantum Hall regime in GaAs and graphene. Physical Review B, 2013, 87, .	1.1	73
29	Landau level mixing and the fractional quantum Hall effect. Physical Review B, 2013, 87, .	1.1	79
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31	Dynamical mass generation of composite Dirac fermions and fractional quantum Hall effects near charge neutrality in graphene. Journal of Physics Condensed Matter, 2013, 25, 305601.	0.7	4
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33	Influence of device geometry on tunneling in the $\nu = 1/2$ Hall liquid. Physical Review B, 2013, 88, .	1.1	35
34	Recent experimental progress of fractional quantum Hall effect: 5/2 filling state and graphene. National Science Review, 2014, 1, 564-579.	4.6	41
35	Possible realization of a chiral p-wave paired state in a two-component system. Physical Review B, 2014, 90, .	1.1	14
36	Experimental constraints and a possible quantum Hall state at $\nu = 1/2$. Physical Review B, 2014, 90, .	1.1	25

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38	Topological Phases in the Zeroth Landau Level of Bilayer Graphene. Physical Review Letters, 2014, 112, 046602.	2.9	43
39	Effects of Landau Level Mixing on the Fractional Quantum Hall Effect in Monolayer Graphene. Physical Review Letters, 2014, 113, 086401.	2.9	46
40	Experimental probe of topological orders and edge excitations in the second Landau level. Physical Review B, 2014, 90, .	1.1	54
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42	Competing Abelian and non-Abelian topological orders in $\nu = 1/2$ quantum Hall bilayers. Physical Review B, 2015, 91, .	1.1	18
43	Phase diagram and edge states of the $\nu = 1/2$ quantum Hall state with Landau level mixing and finite well thickness. Physical Review B, 2015, 91, .	1.1	17
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46	Phase Diagram of the $\nu = 5/2$ Fractional Quantum Hall Effect: Effects of Landau-Level Mixing and Nonzero Width. Physical Review X, 2015, 5, .	2.8	70
47	Landau-Level Mixing and Particle-Hole Symmetry Breaking for Spin Transitions in the Fractional Quantum Hall Effect. Physical Review Letters, 2016, 117, 116803.	2.9	25
48	Striped quantum Hall state in a half-filled Landau level. Physical Review B, 2016, 93, .	1.1	37
49	Nature of composite fermions and the role of particle-hole symmetry: A microscopic account. Physical Review B, 2016, 93, .	1.1	55
50	Stabilization of the Particle-Hole Pfaffian Order by Landau-Level Mixing and Impurities That Break Particle-Hole Symmetry. Physical Review Letters, 2016, 117, 096802.	2.9	85
51	Identification of the fractional quantum Hall edge modes by density oscillations. Physical Review B, 2016, 94, .	1.1	6
52	Observation of a transition from a topologically ordered to a spontaneously broken symmetry phase. Nature Physics, 2016, 12, 191-195.	6.5	68
53	The enigma of the $\nu = 1/2$ quantum Hall effect. Physical Review B, 2017, 95, .	1.1	18
54	Formation of spin droplet at $\nu = 1/2$ an asymmetric quantum dot under quantum Hall conditions. Physical Review B, 2017, 95, .	1.1	2

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56	Competing states for the fractional quantum Hall effect in the $1/3$ -filled second Landau level. Physical Review B, 2017, 96, .	1.1	11
57	Surprising robustness of particle-hole symmetry for composite-fermion liquids. Physical Review B, 2017, 96, .	1.1	16
58	Supersymmetry in the fractional quantum Hall regime. Physical Review B, 2017, 95, .	1.1	7
59	Observation of an anomalous density-dependent energy gap of the $\nu=1/2$ fractional quantum Hall state in the low-density regime. Physical Review B, 2017, 96, .	1.1	15
60	Onset of quantum criticality in the topological-to-nematic transition in a two-dimensional electron gas at filling factor $\hat{\nu}=5/2$. Physical Review B, 2017, 96, .	1.1	15
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62	Non-Abelian Parton Fractional Quantum Hall Effect in Multilayer Graphene. Nano Letters, 2017, 17, 4643-4647.	4.5	47
63	Three-body interactions in generic fractional quantum Hall systems and impact of Galilean invariance breaking. Physical Review B, 2018, 98, .	1.1	12
64	Numerical exploration of trial wave functions for the particle-hole-symmetric Pfaffian. Physical Review B, 2018, 98, .	1.1	34
65	Parton construction of a wave function in the anti-Pfaffian phase. Physical Review B, 2018, 98, .	1.1	60
66	Berry phase of the composite-fermion Fermi sea: Effect of Landau-level mixing. Physical Review B, 2018, 98, .	1.1	12
67	Theory of Disorder-Induced Half-Integer Thermal Hall Conductance. Physical Review Letters, 2018, 121, 026801.	2.9	71
68	Electron-electron interactions and the paired-to-nematic quantum phase transition in the second Landau level. Nature Communications, 2018, 9, 2400.	5.8	22
69	Model interactions for Pfaffian paired states based on Chern-Simons field theory description. Physical Review B, 2019, 100, .	1.1	7
70	Edge-induced topological phase transition of the quantum Hall state at half filling. Physical Review B, 2019, 99, .	1.1	1
71	Particle-hole-symmetric model for a paired fractional quantum Hall state in a half-filled Landau level. Physical Review B, 2019, 99, .	1.1	6
72	Competition of Pairing and Nematicity in the Two-Dimensional Electron Gas. Annual Review of Condensed Matter Physics, 2020, 11, 17-35.	5.2	8

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73	Topological Interface between Pfaffian and Anti-Pfaffian Order in $\langle \mathbb{Z}_2 \rangle$ Quantum Hall Effect. Physical Review Letters, 2020, 125, 146802.	2.9	18
74	Disorder broadening of even-denominator fractional quantum Hall states in the presence of a short-range alloy potential. Physical Review B, 2020, 102, .	1.1	3
75	Large-scale simulations of particle-hole-symmetric Pfaffian trial wave functions. Physical Review B, 2020, 102, .	1.1	15
76	Stability of the particle-hole Pfaffian state and the $\langle \mathbb{Z}_2 \rangle$ -fractional quantum Hall effect. Physical Review B, 2021, 104, .	1.1	14
77	Composite fermion mass enhancement and particle-hole symmetry of fractional quantum Hall states in the lowest Landau level under realistic conditions. Physical Review B, 2021, 104, .	1.1	1
78	Graviton chirality and topological order in the half-filled Landau level. Physical Review B, 2021, 104, .	1.1	9
79	Overview of Experiments Probing the Properties of the $\nu = 5/2$ State. Springer Series in Solid-state Sciences, 2015, , 73-93.	0.3	0
80	Non-equilibrium Transport in Density Modulated Phases of the Second Landau Level. Springer Series in Solid-state Sciences, 2015, , 265-285.	0.3	0
81	Quasiparticle Tunneling in the Second Landau Level. Springer Series in Solid-state Sciences, 2015, , 187-218.	0.3	0
82	Origin of the Fractional Quantum Hall State-to-Nematic Phase Transition in the Second Landau Level. Springer Theses, 2019, , 91-101.	0.0	0
83	Identifying the $\langle \mathbb{Z}_2 \rangle$ Topological Order through Charge Transport Measurements. Physical Review Letters, 2022, 128, 016401.	2.9	5
84	Analytic exposition of the graviton modes in fractional quantum Hall effects and its physical implications. Physical Review B, 2022, 105, .	1.1	7
85	Approximate two-body generating Hamiltonian for the particle-hole Pfaffian wave function. Physical Review B, 2021, 104, .	1.1	4
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87	Two-component parton fractional quantum Hall state in graphene. Physical Review B, 2022, 106, .	1.1	1
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89	Possible restoration of particle-hole symmetry in the $5/2$ -quantized Hall state at small magnetic field. Physical Review B, 2023, 107, .	1.1	4
90	Fractional quantum Hall effect at the filling factor $\hat{\nu} = 5/2$. , 2024, , 324-365.		3

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