

Strongly Correlated Metal Built from Sachdev-Ye-Kitaev

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Citation Report

#	ARTICLE	IF	CITATIONS
1	All point correlation functions in SYK. Journal of High Energy Physics, 2017, 2017, 1.	1.6	98
2	Strange metal from local quantum chaos. Physical Review B, 2018, 97, .	1.1	33
3	Partially filled Landau level at even denominators: A vortex metal with a Berry phase. Physical Review B, 2018, 97, .	1.1	7
4	Diffusion in higher dimensional SYK model with complex fermions. Journal of High Energy Physics, 2018, 2018, 1.	1.6	31
5	Periodic Anderson model meets Sachdev-Ye-Kitaev interaction: a solvable playground for heavy fermion physics. Journal of Physics Communications, 2018, 2, 095014.	0.5	6
6	$\mathcal{N}=\left(0, 2\right)$ SYK, chaos and higher-spins. Journal of High Energy Physics, 2018, 2018, 1.	1.6	18
7	Temperature Dependence of the Butterfly Effect in a Classical Many-Body System. Physical Review Letters, 2018, 121, 250602.	2.9	30
8	Mimicking black hole event horizons in atomic and solid-state systems. Nature Reviews Materials, 2018, 3, 491-501.	23.3	44
9	Sachdev-Ye-Kitaev Model with Quadratic Perturbations: The Route to a Non-Fermi Liquid. Physical Review Letters, 2018, 121, 236601.	2.9	22
10	Candidate theory for the strange metal phase at a finite-energy window. Physical Review B, 2018, 98, .	1.1	22
11	Dynamo Effect and Turbulence in Hydrodynamic Weyl Metals. Physical Review Letters, 2018, 121, 176603.	2.9	18
12	Effective dimension, level statistics, and integrability of Sachdev-Ye-Kitaev-like models. Physical Review D, 2018, 98, .	1.6	15
13	Coherent Superconductivity with a Large Gap Ratio from Incoherent Metals. Physical Review Letters, 2018, 121, 187001.	2.9	32
14	Z_2 fractionalized phases of a solvable disordered $t\hat{J}$ model. Physical Review B, 2018, 98, .	1.1	13
15	Critical strange metal from fluctuating gauge fields in a solvable random model. Physical Review B, 2018, 98, .	1.1	27
16	Low-high voltage duality in tunneling spectroscopy of the Sachdev-Ye-Kitaev model. Physical Review B, 2018, 98, .	1.1	17
17	Seeking to Develop Global SYK-Ness. Condensed Matter, 2018, 3, 40.	0.8	8
18	Topological Sachdev-Ye-Kitaev model. Physical Review B, 2018, 97, .	1.1	25

#	ARTICLE	IF	CITATIONS
19	Magnetotransport in a Model of a Disordered Strange Metal. Physical Review X, 2018, 8, .	2.8	76
20	Universality and Thouless energy in the supersymmetric Sachdev-Ye-Kitaev model. Physical Review D, 2018, 97, .	1.6	46
21	Quantum criticality and duality in the AdS_2 Sachdev-Ye-Kitaev chain. Physical Review B, 2018, 97, .	1.1	25
22	Family of Sachdev-Ye-Kitaev models motivated by experimental considerations. Physical Review B, 2018, 97, .	1.1	17
23	Translationally Invariant Non-Fermi-Liquid Metals with Critical Fermi Surfaces: Solvable Models. Physical Review X, 2018, 8, .	2.8	96
24	Quantum Holography in a Graphene Flake with an Irregular Boundary. Physical Review Letters, 2018, 121, 036403.	2.9	72
25	Higher-dimensional Sachdev-Ye-Kitaev non-Fermi liquids at Lifshitz transitions. Physical Review B, 2018, 97, .	1.1	39
26	Quantum entanglement of the Sachdev-Ye-Kitaev models. Physical Review B, 2018, 97, .	1.1	65
27	Chaotic-Integrable Transition in the Sachdev-Ye-Kitaev Model. Physical Review Letters, 2018, 120, 241603.	2.9	90
28	Theory of a Planckian Metal. Physical Review Letters, 2019, 123, 066601.	2.9	88
29	Correlation functions in Schwarzian liquid. Physical Review D, 2019, 99, .	1.6	6
30	Lattice models for non-Fermi liquids with tunable transport scalings. Physical Review B, 2019, 100, .	1.1	8
31	Exotic quantum statistics and thermodynamics from a number-conserving theory of Majorana fermions. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 315001.	0.7	3
32	Transport and chaos in lattice Sachdev-Ye-Kitaev models. Physical Review B, 2019, 100, .	1.1	36
33	An introduction to the SYK model. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 323001.	0.7	88
34	Solvable model for quantum criticality between the Sachdev-Ye-Kitaev liquid and a disordered Fermi liquid. Physical Review B, 2019, 100, .	1.1	10
35	Chaos in a classical limit of the Sachdev-Ye-Kitaev model. Physical Review B, 2019, 100, .	1.1	26
36	Quantum Criticality of Granular Sachdev-Ye-Kitaev Matter. Physical Review Letters, 2019, 123, 106601.	2.9	27

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37	Eigenstate thermalization scaling in Majorana clusters: From chaotic to integrable Sachdev-Ye-Kitaev models. <i>Physical Review B</i> , 2019, 100, .	1.1	25
38	Cooper pairing of incoherent electrons: An electron-phonon version of the Sachdev-Ye-Kitaev model. <i>Physical Review B</i> , 2019, 100, .	1.1	65
39	On the replica structure of Sachdev-Ye-Kitaev model. <i>Journal of High Energy Physics</i> , 2019, 2019, 1.	1.6	20
40	Many-body localization in a finite-range Sachdev-Ye-Kitaev model and holography. <i>Physical Review B</i> , 2019, 99, .	1.1	15
41	Quantum simulation of the non-fermi-liquid state of Sachdev-Ye-Kitaev model. <i>Npj Quantum Information</i> , 2019, 5, .	2.8	34
42	Symmetry Breaking in Coupled SYK or Tensor Models. <i>Physical Review X</i> , 2019, 9, .	2.8	55
43	Interacting Majorana fermions. <i>Reports on Progress in Physics</i> , 2019, 82, 084501.	8.1	33
44	Tenfold way and many-body zero modes in the Sachdev-Ye-Kitaev model. <i>Physical Review B</i> , 2019, 99, .	1.1	13
45	Bad Metallic Transport in a Modified Hubbard Model. <i>Physical Review Letters</i> , 2019, 122, 186601.	2.9	21
46	Out-of-time-ordered correlators of the Hubbard model: Sachdev-Ye-Kitaev strange metal in the spin-freezing crossover region. <i>Physical Review B</i> , 2019, 99, .	1.1	7
47	Conformality of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{mml:mrow} \langle \text{mml:mn} \rangle 1 \langle \text{mml:mn} \rangle \langle \text{mml:mo stretchy="false"} \rangle \langle \text{mml:mi} \rangle N \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ corrections in Sachdev-Ye-Kitaev-like models. <i>Physical Review D</i> , 2019, 100, .	1.6	6
48	Reentrant superconductivity in a quantum dot coupled to a Sachdev-Ye-Kitaev metal. <i>Physical Review B</i> , 2019, 100, .	1.1	6
49	Global phase diagram of the one-dimensional Sachdev-Ye-Kitaev model at finite N. <i>Physical Review B</i> , 2019, 100, .	1.1	8
50	Sachdev-Ye-Kitaev Non-Fermi-Liquid Correlations in Nanoscopic Quantum Transport. <i>Physical Review Letters</i> , 2019, 123, 226801.	2.9	34
51	Evaporation dynamics of the Sachdev-Ye-Kitaev model. <i>Physical Review B</i> , 2019, 100, .	1.1	28
52	Hydrodynamic Coulomb drag and bounds on diffusion. <i>Physical Review B</i> , 2019, 100, .	1.1	1
53	Quantum chaos in the Brownian SYK model with large finite N : OTOCs and tripartite information. <i>Journal of High Energy Physics</i> , 2019, 2019, 1.	1.6	51
54	Universal T-linear resistivity and Planckian dissipation in overdoped cuprates. <i>Nature Physics</i> , 2019, 15, 142-147.	6.5	197

#	ARTICLE	IF	CITATIONS
55	Information scrambling in chaotic systems with dissipation. Physical Review B, 2019, 99, .	1.1	36
56	Charge transport in graphene-based mesoscopic realizations of Sachdev-Ye-Kitaev models. Physical Review B, 2019, 99, .	1.1	22
57	Gapless odd-frequency superconductivity induced by the Sachdev-Ye-Kitaev model. Physical Review B, 2019, 99, .	1.1	7
58	Accessing scrambling using matrix product operators. Nature Physics, 2020, 16, 199-204.	6.5	78
59	Linear resistivity and Sachdev-Ye-Kitaev (SYK) spin liquid behavior in a quantum critical metal with spin-1/2 fermions. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 18341-18346.	3.3	39
60	Quenched vs Annealed: Glassiness from SK to SYK. Physical Review X, 2020, 10, .	2.8	13
61	Linear in temperature resistivity in the limit of zero temperature from the time reparameterization soft mode. Annals of Physics, 2020, 418, 168202.	1.0	24
62	Perturbed Sachdev-Ye-Kitaev Model: A Polaron in the Hyperbolic Plane. Physical Review Letters, 2020, 125, 196602.	2.9	11
63	Graphene Reveals Its Strange Side. Physics Magazine, 2020, 13, .	0.1	0
64	Supersymmetry method for interacting chaotic and disordered systems: The Sachdev-Ye-Kitaev model. Physical Review B, 2020, 102, .	1.1	6
65	Quantum many-body physics from a gravitational lens. Nature Reviews Physics, 2020, 2, 615-633.	11.9	19
66	Holographic unitary renormalization group for correlated electrons - II: Insights on fermionic criticality. Nuclear Physics B, 2020, 960, 115163.	0.9	8
67	Anomalous thermodynamic properties of quantum critical superconductors. Physical Review B, 2020, 102, .	1.1	8
68	Deconfined Critical Point in a Doped Random Quantum Heisenberg Magnet. Physical Review X, 2020, 10, .	2.8	24
69	Thermoelectric power of Sachdev-Ye-Kitaev islands: Probing Bekenstein-Hawking entropy in quantum matter experiments. Physical Review B, 2020, 101, .	1.1	23
70	Towards quantum simulation of Sachdev-Ye-Kitaev model. Science Bulletin, 2020, 65, 1170-1176.	4.3	2
71	Supersymmetry in the Standard Sachdev-Ye-Kitaev Model. Physical Review Letters, 2020, 124, 236804.	2.9	18
72	Low-rank Sachdev-Ye-Kitaev models. Physical Review B, 2020, 101, .	1.1	18

#	ARTICLE	IF	CITATIONS
73	Periodically Driven Sachdev-Ye-Kitaev Models. <i>Physical Review Letters</i> , 2020, 124, 106401.	2.9	27
74	Flat space holography and the complex Sachdev-Ye-Kitaev model. <i>Physical Review D</i> , 2020, 101, .	1.6	38
75	Connecting the SYK Dots. <i>Condensed Matter</i> , 2020, 5, 37.	0.8	10
76	Toy model for anomalous transport and Griffiths effects near the many-body localization transition. <i>Physical Review B</i> , 2020, 101, .	1.1	7
77	Solvable Strong-Coupling Quantum-Dot Model with a Non-Fermi-Liquid Pairing Transition. <i>Physical Review Letters</i> , 2020, 124, 017002.	2.9	46
78	Chaos in the butterfly cone. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	1.6	41
79	Excitation spectra of quantum matter without quasiparticles. II. Random $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"> \langle \text{mml:mi>t</mml:mi> \langle \text{mml:mo>\hat{</mml:mo> \langle \text{mml:mi>J</mml:mi> \langle \text{mml:mi> \langle \text{mml:math> models. Physical Review B, 2021, 103, .$		
80	Non-unitary dynamics of Sachdev-Ye-Kitaev chain. <i>SciPost Physics</i> , 2021, 10, .	1.5	28
81	Dirac fast scramblers. <i>Physical Review B</i> , 2021, 103, .	1.1	13
82	Yukawa-SYK model and self-tuned quantum criticality. <i>Physical Review Research</i> , 2021, 3, .	1.3	18
83	Variational wave functions for Sachdev-Ye-Kitaev models. <i>Physical Review Research</i> , 2021, 3, .	1.3	6
84	Thermal effects in non-Fermi liquid superconductivity. <i>Physical Review B</i> , 2021, 103, .	1.1	5
85	Resistivity minimum emerges in Anderson impurity model modified with Sachdev-Ye-Kitaev interaction*. <i>Chinese Physics B</i> , 2021, 30, 047106.	0.7	0
86	Emergent mesoscopic quantum vortex and Planckian dissipation in the strange metal phase. <i>New Journal of Physics</i> , 2021, 23, 043050.	1.2	4
87	Quantum thermal transport in the charged Sachdev-Ye-Kitaev model: Thermoelectric Coulomb blockade. <i>Physical Review B</i> , 2021, 103, .	1.1	5
88	Bad metallic transport in geometrically frustrated models. <i>Physical Review B</i> , 2021, 103, .	1.1	5
89	Disconnecting a traversable wormhole: Universal quench dynamics in random spin models. <i>Physical Review Research</i> , 2021, 3, .	1.3	7
90	On 1D, $\mathcal{N} = 4$ supersymmetric SYK-type models. Part I. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	1.6	5

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91	Page curve from non-Markovianity. Journal of High Energy Physics, 2021, 2021, 1.	1.6	11
92	Superconducting instabilities in a spinful Sachdev-Ye-Kitaev model. Physical Review B, 2021, 104, .	1.1	17
93	Long-range-ordered phase in a quantum Heisenberg chain with interactions beyond nearest neighbors. Physical Review A, 2021, 104, .	1.0	9
94	Quantum discontinuity fixed point and renormalization group flow of the Sachdev-Ye-Kitaev model. Physical Review Research, 2021, 3, .	1.3	3
95	Superconducting critical temperature in the extended diffusive Sachdev-Ye-Kitaev model. Physical Review Research, 2021, 3, .	1.3	8
96	Quantum chaos of the Bose-Fermi Kondo model at intermediate temperature. Physical Review B, 2021, 104, .	1.1	4
97	Quantum tunneling dynamics in a complex-valued Sachdev-Ye-Kitaev model quench-coupled to a cool bath. Physical Review B, 2021, 104, .	1.1	9
98	Measurement-Induced Phase Transition in the Monitored Sachdev-Ye-Kitaev Model. Physical Review Letters, 2021, 127, 140601.	2.9	68
99	Superconductivity of incoherent electrons in the Yukawa Sachdev-Ye-Kitaev model. Physical Review B, 2021, 104, .	1.1	13
100	Entanglement entropy and its quench dynamics for pure states of the Sachdev-Ye-Kitaev model. Journal of High Energy Physics, 2020, 2020, 1.	1.6	20
101	Non-Landau quantum phase transitions and nearly-marginal non-Fermi liquid. Journal of Statistical Mechanics: Theory and Experiment, 2020, 2020, 073102.	0.9	1
102	Intrinsic superconducting instabilities of a solvable model for an incoherent metal. Physical Review Research, 2020, 2, .	1.3	30
103	Quench, thermalization, and residual entropy across a non-Fermi liquid to Fermi liquid transition. Physical Review Research, 2020, 2, .	1.3	23
104	Violation of the viscosity/entropy bound in translationally invariant non-Fermi liquids. Physical Review Research, 2020, 2, .	1.3	6
105	Sachdev-Ye-Kitaev superconductivity: Quantum Kuramoto and generalized Richardson models. Physical Review Research, 2020, 2, .	1.3	21
106	Quantum phase transition in the Yukawa-SYK model. Physical Review Research, 2020, 2, .	1.3	27
107	Subdiffusion in strongly tilted lattice systems. Physical Review Research, 2020, 2, .	1.3	27
108	Strongly coupled quantum phonon fluid in a solvable model. Physical Review Research, 2020, 2, .	1.3	11

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109	Slope invariant $\langle T \rangle$ -linear resistivity from local self-energy. Physical Review Research, 2020, 2, .	1.3	26
110	Rényi entanglement entropy of Fermi and non-Fermi liquids: Sachdev-Ye-Kitaev model and dynamical mean field theories. Physical Review Research, 2020, 2, .	1.3	21
111	Traversable wormhole and Hawking-Page transition in coupled complex SYK models. Physical Review Research, 2020, 2, .	1.3	27
112	Thickening and sickening the SYK model. SciPost Physics, 2018, 5, .	1.5	20
113	A simple mechanism for unconventional superconductivity in a repulsive fermion model. , 2019, 6, .		8
114	Subsystem Rényi entropy of thermal ensembles for SYK-like models. SciPost Physics, 2020, 8, .	1.5	32
115	One SYK single electron transistor. Lithuanian Journal of Physics, 2020, 60, .	0.1	7
116	Linear-in- $\langle T \rangle$ resistivity from semiholographic non-Fermi liquid models. Physical Review D, 2021, 104, .	1.6	5
117	Strongly coupled phonon fluid and Goldstone modes in an anharmonic quantum solid: Transport and chaos. Physical Review B, 2021, 104, .	1.1	7
118	Emergent Replica Conformal Symmetry in Non-Hermitian SYK $\langle \chi^2 \rangle$ Chains. Quantum - the Open Journal for Quantum Science, 0, 5, 579.	0.0	30
119	Thermalization of randomly coupled SYK models. Journal of Statistical Mechanics: Theory and Experiment, 2022, 2022, 013103.	0.9	2
120	The Extended Diffusive Sachdev-Ye-Kitaev Model as a Sort of "Strange Metal". Physica Status Solidi (B): Basic Research, 0, , 2100271.	0.7	1
121	Quenches and (pre)thermalization in a mixed Sachdev-Ye-Kitaev model. Physical Review B, 2022, 105, .	1.1	8
122	Non-equilibrium Sachdev-Ye-Kitaev model with quadratic perturbation. SciPost Physics, 2022, 12, .	1.5	2
123	Thermalization of many many-body interacting Sachdev-Ye-Kitaev models. Physical Review B, 2022, 105, .	1.1	10
124	Non-local reparametrization action in coupled Sachdev-Ye-Kitaev models. Journal of High Energy Physics, 2021, 2021, 1.	1.6	7
125	Non-Fermi liquid behavior in the Sachdev-Ye-Kitaev model for a one-dimensional incoherent semimetal. Physical Review Research, 2022, 4, .	1.3	3
126	Spin liquid to spin glass crossover in the random quantum Heisenberg magnet. Physical Review B, 2022, 105, .	1.1	7

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127	Sachdev-Ye-Kitaev type physics in the strained Kitaev honeycomb model. Physical Review B, 2022, 105, .	1.1	3
128	Sachdev-Ye-Kitaev Circuits for Braiding and Charging Majorana Zero Modes. Physical Review Letters, 2022, 128, 106805.	2.9	6
129	Chiral Sachdev-Ye model: Integrability and chaos of anyons in $1+1$ dimensions. Physical Review B, 2022, 105, .	1.1	6
130	Energy transport in Sachdev-Ye-Kitaev networks coupled to thermal baths. Physical Review Research, 2022, 4, .	1.3	5
131	Four coupled SYK models and nearly AdS ₂ gravities: phase transitions in traversable wormholes and in bra-ket wormholes. Classical and Quantum Gravity, 2022, 39, 084001.	1.5	7
132	Strange Metals from Melting Correlated Insulators in Twisted Bilayer Graphene. Physical Review Letters, 2021, 127, 266601.	2.9	11
133	Quantum entanglement in the Sachdev-Ye-Kitaev model and its generalizations. Frontiers of Physics, 2022, 17, 1.	2.4	8
134	Many-body energy invariant for T -linear resistivity. Physical Review B, 2022, 105, .	1.1	2
135	Planckian metal at a doping-induced quantum critical point. Physical Review B, 2022, 105, .	1.1	10
136	Pairing instabilities of the Yukawa-SYK models with controlled fermion incoherence. SciPost Physics, 2022, 12, .	1.5	6
137	Notes on complexity growth rate, grand potential and partition function. General Relativity and Gravitation, 2022, 54, .	0.7	2
138	Universal Entanglement Transitions of Free Fermions with Long-range Non-unitary Dynamics. Quantum - the Open Journal for Quantum Science, 0, 6, 723.	0.0	17
139	Space-time duality between quantum chaos and non-Hermitian boundary effect. Physical Review Research, 2022, 4, .	1.3	5
140	Near-equilibrium approach to transport in complex Sachdev-Ye-Kitaev models. Physical Review B, 2022, 105, .	1.1	7
141	Violation and revival of Kramers' degeneracy in open quantum systems. Physical Review B, 2022, 105, .	1.1	3
142	Lindbladian dissipation of strongly-correlated quantum matter. Physical Review Research, 2022, 4, .	1.3	22
143	The gloria mundi of SYK does not transit yet. Lithuanian Journal of Physics, 2022, 62, .	0.1	1
144	Fingerprints of quantum criticality in locally resolved transport. SciPost Physics, 2022, 13, .	1.5	1

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145	Lindblad dynamics of the Sachdev-Ye-Kitaev model. <i>Physical Review B</i> , 2022, 106, .	1.1	18
146	Probing quantum chaos in multipartite systems. <i>Physical Review Research</i> , 2022, 4, .	1.3	3
148	Sachdev-Ye-Kitaev models and beyond: Window into non-Fermi liquids. <i>Reviews of Modern Physics</i> , 2022, 94, .	16.4	90
149	Solvable model for a charge- 4 superconductor. <i>Physical Review B</i> , 2022, 106, .	1.1	0
150	High-frequency transport and zero-sound in an array of SYK quantum dots. <i>SciPost Physics</i> , 2022, 13, .	1.5	2
151	Quantum interference of hydrodynamic modes in a dirty marginal Fermi liquid. <i>Physical Review B</i> , 2022, 106, .	1.1	3
152	Colloquium : Planckian dissipation in metals. <i>Reviews of Modern Physics</i> , 2022, 94, .	16.4	43
153	Superconductor-Insulator Transition in a Non-Fermi Liquid. <i>Physical Review Letters</i> , 2022, 129, .	2.9	4
154	Entanglement phases in large- N hybrid Brownian circuits with long-range couplings. <i>Physical Review B</i> , 2022, 106, .	1.1	6
155	A proposal to extract and enhance four-Majorana interactions in hybrid nanowires. <i>SciPost Physics</i> , 2022, 13, .	1.5	1
156	Nematic phases and elasto-resistivity from a multi-orbital non-Fermi liquid. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2023, 120, .	3.3	1
157	Planckian dissipation and non-Ginzburg-Landau type upper critical field in Bi2201. <i>Science China: Physics, Mechanics and Astronomy</i> , 2023, 66, .	2.0	0
158	Superconductivity of non-Fermi liquids described by Sachdev-Ye-Kitaev models. <i>Physical Review Research</i> , 2023, 5, .	1.3	3
159	Binary-coupling sparse Sachdev-Ye-Kitaev model: An improved model of quantum chaos and holography. <i>Physical Review B</i> , 2023, 107, .	1.1	7
160	Shared universality of charged black holes and the complex large- q Sachdev-Ye-Kitaev model. <i>Physical Review B</i> , 2023, 107, .	1.1	3
161	Absence of operator growth for average equal-time observables in charge-conserved sectors of the Sachdev-Ye-Kitaev model. <i>Journal of High Energy Physics</i> , 2023, 2023, .	1.6	1
162	Collective density fluctuations of strange metals with critical Fermi surfaces. <i>Physical Review B</i> , 2023, 107, .	1.1	5