Gregory Schehr

List of Publications by Year in Descending Order

152 papers	3,438 citations	29 h-index	50 g-index
163 ext. papers	4,381 ext. citations	3.4 avg, IF	6.26 L-index

#	Paper	IF	Citations
152	Statistics of the maximum and the convex hull of a Brownian motion in confined geometries. *Journal of Physics A: Mathematical and Theoretical*, **2022**, 55, 144002	2	0
151	Edge fluctuations and third-order phase transition in harmonically confined long-range systems. *Journal of Statistical Mechanics: Theory and Experiment*, **2022**, 2022, 033203	1.9	1
150	Record statistics for random walks and Lévy flights with resetting. *Journal of Physics A: Mathematical and Theoretical*, **2022**, 55, 034002	2	0
149	Harmonically confined long-ranged interacting gas in the presence of a hard wall. *Journal of Statistical Mechanics: Theory and Experiment*, **2021**, 2021, 103209	1.9	3
148	Stationary nonequilibrium bound state of a pair of run and tumble particles. *Physical Review E*, **2021**, 104, 044103	2.4	1
147	Counting statistics for noninteracting fermions in a d-dimensional potential. *Physical Review E*, **2021**, 103, L030105	2.4	4
146	Survival probability of a run-and-tumble particle in the presence of a drift. *Journal of Statistical Mechanics: Theory and Experiment*, **2021**, 2021, 043211	1.9	8
145	Impurities in systems of noninteracting trapped fermions. *SciPost Physics*, **2021**, 10,	6.1	1
144	Non-intersecting Brownian Bridges in the Flat-to-Flat Geometry. *Journal of Statistical Physics*, **2021**, 183, 1	1.5	7
143	Condensation transition in the late-time position of a run-and-tumble particle. *Physical Review E*, **2021**, 103, 062134	2.4	7
142	Tracy-Widom Distributions for the Gaussian Orthogonal and Symplectic Ensembles Revisited: A Skew-Orthogonal Polynomials Approach. *Journal of Statistical Physics*, **2021**, 182, 1	1.5	1
141	Mean perimeter and area of the convex hull of a planar Brownian motion in the presence of resetting. *Physical Review E*, **2021**, 103, 022135	2.4	9
140	Kernels for non interacting fermions via a Green's function approach with applications to step potentials. *Journal of Physics A: Mathematical and Theoretical*, **2021**, 54, 084001	2	1
139	Generating discrete-time constrained random walks and Lévy flights. *Physical Review E*, **2021**, 104, 024117	2.4	4
138	Expected maximum of bridge random walks & Lévy flights. *Journal of Statistical Mechanics: Theory and Experiment*, **2021**, 2021, 083215	1.9	1
137	Generating constrained run-and-tumble trajectories. *Journal of Physics A: Mathematical and Theoretical*, **2021**, 54, 385004	2	2
136	Generating stochastic trajectories with global dynamical constraints. *Journal of Statistical Mechanics: Theory and Experiment*, **2021**, 2021, 123204	1.9	1

135	Noninteracting trapped fermions in double-well potentials: Inverted-parabola kernel. *Physical Review A*, **2020**, 101,	2.6	1
134	Distribution of the time between maximum and minimum of random walks. *Physical Review E*, **2020**, 101, 052111	2.4	9
133	Numerical solution of the dynamical mean field theory of infinite-dimensional equilibrium liquids. *Journal of Chemical Physics*, **2020**, 152, 164506	3.9	14
132	Current fluctuations in noninteracting run-and-tumble particles in one dimension. *Physical Review E* , **2020**, 101, 052101	2.4	13
131	Stochastic resetting and applications. *Journal of Physics A: Mathematical and Theoretical*, **2020**, 53, 193001	2.1	132
130	Velocity and diffusion constant of an active particle in a one-dimensional force field. *Europhysics Letters*, **2020**, 130, 40002	1.6	15
129	Universal Survival Probability for a d-Dimensional Run-and-Tumble Particle. *Physical Review Letters*, **2020**, 124, 090603	7.4	34
128	Ising model with stochastic resetting. *Physical Review Research*, **2020**, 2,	3.9	21
127	The convex hull of the run-and-tumble particle in a plane. *Journal of Statistical Mechanics: Theory and Experiment*, **2020**, 2020, 053401	1.9	14
126	Intermittent resetting potentials. *Journal of Statistical Mechanics: Theory and Experiment*, **2020**, 2020, 113203	1.9	12
125	Statistics of the number of records for random walks and Lévy flights on a 1D lattice. *Journal of Physics A: Mathematical and Theoretical*, **2020**, 53, 415003	2	4
124	Extreme value statistics of correlated random variables: A pedagogical review. *Physics Reports*, **2020**, 840, 1-32	27.7	50
123	Exact stationary state of a run-and-tumble particle with three internal states in a harmonic trap. *Journal of Physics A: Mathematical and Theoretical*, **2020**, 53, 09LT01	2	25
122	Last-Passage Time for Linear Diffusions and Application to the Emptying Time of a Box. *Journal of Statistical Physics*, **2020**, 181, 1565-1602	1.5	2
121	Universal properties of a run-and-tumble particle in arbitrary dimension. *Physical Review E*, **2020**, 102, 042133	2.4	13
120	Smoluchowski flux and lamb-lion problems for random walks and Lévy flights with a constant drift. *Journal of Statistical Mechanics: Theory and Experiment*, **2019**, 2019, 083214	1.9	1
119	Gap statistics close to the quantile of a random walk. *Journal of Physics A: Mathematical and Theoretical*, **2019**, 52, 315003	2	3
118	Nonequilibrium dynamics of noninteracting fermions in a trap. *Europhysics Letters*, **2019**, 126, 20006	1.6	9

117	Run-and-tumble particle in one-dimensional confining potentials: Steady-state, relaxation, and first-passage properties. *Physical Review E*, **2019**, 99, 032132	2.4	73
116	Rotating trapped fermions in two dimensions and the complex Ginibre ensemble: Exact results for the entanglement entropy and number variance. *Physical Review A*, **2019**, 99,	2.6	12
115	Noninteracting fermions in a trap and random matrix theory. *Journal of Physics A: Mathematical and Theoretical*, **2019**, 52, 144006	2	23
114	Intermediate deviation regime for the full eigenvalue statistics in the complex Ginibre ensemble. *Physical Review E*, **2019**, 100, 012137	2.4	7
113	Non-crossing Brownian Paths and Dyson Brownian Motion Under a Moving Boundary. *Journal of Statistical Physics*, **2019**, 177, 752-805	1.5	10
112	Time Between the Maximum and the Minimum of a Stochastic Process. *Physical Review Letters*, **2019**, 123, 200201	7.4	9
111	Noncrossing run-and-tumble particles on a line. *Physical Review E*, **2019**, 100, 012113	2.4	29
110	Long-time position distribution of an active Brownian particle in two dimensions. *Physical Review E*, **2019**, 100, 062116	2.4	32
109	Extremes of 2d Coulomb gas: universal intermediate deviation regime. *Journal of Statistical Mechanics: Theory and Experiment*, **2018**, 2018, 013203	1.9	11
108	Multicritical Edge Statistics for the Momenta of Fermions in Nonharmonic Traps. *Physical Review Letters*, **2018**, 121, 030603	7.4	18
107	Wigner function of noninteracting trapped fermions. *Physical Review A*, **2018**, 97,	2.6	18
106	Fluctuations of observables for free fermions in a harmonic trap at finite temperature. *SciPost Physics*, **2018**, 4,	6.1	8
105	Non-interacting fermions in hard-edge potentials. *Journal of Statistical Mechanics: Theory and Experiment*, **2018**, 2018, 123103	1.9	7
104	Ground-state energy of noninteracting fermions with a random energy spectrum. *Europhysics Letters*, **2018**, 124, 40005	1.6	5
103	Active Brownian motion in two dimensions. *Physical Review E*, **2018**, 98,	2.4	44
102	Exact Persistence Exponent for the 2D-Diffusion Equation and Related Kac Polynomials. *Physical Review Letters*, **2018**, 121, 150601	7.4	13
101	High-precision simulation of the height distribution for the KPZ equation. *Europhysics Letters*, **2018**, 121, 67004	1.6	23
100	Extreme statistics and index distribution in the classical 1dCoulomb gas. *Journal of Physics A: Mathematical and Theoretical*, **2018**, 51, 295001	2	13

99	Statistics of the maximal distance and momentum in a trapped Fermi gas at low temperature. *Journal of Statistical Mechanics: Theory and Experiment*, **2017**, 2017, 063301	1.9	11
98	Record statistics of a strongly correlated time series: random walks and Lévy flights. *Journal of Physics A: Mathematical and Theoretical*, **2017**, 50, 333001	2	29
97	First gap statistics of long random walks with bounded jumps. *Journal of Physics A: Mathematical and Theoretical*, **2017**, 50, 185001	2	3
96	Kinetic Energy of a Trapped Fermi Gas at Finite Temperature. *Physical Review Letters*, **2017**, 119, 130601	7.4	9
95	Survival probability of random walks and Lévy flights on a semi-infinite line. *Journal of Physics A: Mathematical and Theoretical*, **2017**, 50, 465002	2	7
94	Periodic Airy process and equilibrium dynamics of edge fermions in a trap. *Annals of Physics*, **2017**, 383, 312-345	2.5	15
93	Exact Extremal Statistics in the Classical 1D Coulomb Gas. *Physical Review Letters*, **2017**, 119, 060601	7.4	23
92	Statistics of fermions in a d-dimensional box near a hard wall. *Europhysics Letters*, **2017**, 120, 10006	1.6	13
91	Exact Short-Time Height Distribution in the One-Dimensional Kardar-Parisi-Zhang Equation and Edge Fermions at High Temperature. *Physical Review Letters*, **2016**, 117, 070403	7.4	40
90	Exact extreme-value statistics at mixed-order transitions. *Physical Review E*, **2016**, 93, 052130	2.4	14
89	Exact Statistics of Record Increments of Random Walks and Lévy Flights. *Physical Review Letters*, **2016**, 117, 010601	7.4	10
88	Noninteracting fermions at finite temperature in a d-dimensional trap: Universal correlations. *Physical Review A*, **2016**, 94,	2.6	52
87	Large deviations for the height in 1D Kardar-Parisi-Zhang growth at late times. *Europhysics Letters*, **2016**, 113, 60004	1.6	49
86	Number statistics for β-ensembles of random matrices: Applications to trapped fermions at zero temperature. *Physical Review E*, **2016**, 94, 032115	2.4	18
85	Exact distributions of cover times for N independent random walkers in one dimension. *Physical Review E*, **2016**, 94, 062131	2.4	6
84	On the gap and time interval between the first two maxima of long continuous time random walks. *Journal of Statistical Mechanics: Theory and Experiment*, **2016**, 2016, 013303	1.9	2
83	Finite N corrections to the limiting distribution of the smallest eigenvalue of Wishart complex matrices. *Random Matrices: Theory and Application*, **2016**, 05, 1650001	0.6	11
82	Finite-temperature free fermions and the Kardar-Parisi-Zhang equation at finite time. *Physical Review Letters*, **2015**, 114, 110402	7.4	42

81	Spatial extent of branching Brownian motion. *Physical Review E*, **2015**, 91, 042131	2.4	16
80	Branching Brownian motion conditioned on particle numbers. *Chaos, Solitons and Fractals*, **2015**, 74, 79-88	3.3	13
79	Statistics of the longest interval in renewal processes. *Journal of Statistical Mechanics: Theory and Experiment*, **2015**, 2015, P03014	1.9	16
78	Record statistics for random walk bridges. *Journal of Statistical Mechanics: Theory and Experiment*, **2015**, 2015, P07026	1.9	9
77	Dynamical transition in the temporal relaxation of stochastic processes under resetting. *Physical Review E*, **2015**, 91, 052131	2.4	86
76	Random walk with random resetting to the maximum position. *Physical Review E*, **2015**, 92, 052126	2.4	51
75	Large time zero temperature dynamics of the spherical p = 2-spin glass model of finite size. *Journal of Statistical Mechanics: Theory and Experiment*, **2015**, 2015, P11017	1.9	14
74	On Certain Functionals of the Maximum of Brownian Motion and Their Applications. *Journal of Statistical Physics*, **2015**, 161, 1112-1154	1.5	10
73	Universal ground-state properties of free fermions in a d -dimensional trap. *Europhysics Letters*, **2015**, 112, 60001	1.6	21
72	Phase transitions and edge scaling of number variance in Gaussian random matrices. *Physical Review Letters*, **2014**, 112, 254101	7.4	40
71	Top eigenvalue of a random matrix: large deviations and third order phase transition. *Journal of Statistical Mechanics: Theory and Experiment*, **2014**, 2014, P01012	1.9	76
70	Near-Extreme Eigenvalues and the First Gap of Hermitian Random Matrices. *Journal of Statistical Physics*, **2014**, 156, 843-876	1.5	16
69	Maximal Distance Travelled by N Vicious Walkers Till Their Survival. *Journal of Statistical Physics*, **2014**, 157, 124-157	1.5	4
68	Diffusion in periodic, correlated random forcing landscapes. *Journal of Physics A: Mathematical and Theoretical*, **2014**, 47, 372001	2	17
67	Universal Order and Gap Statistics of Critical Branching Brownian Motion. *Physical Review Letters*, **2014**, 112,	7.4	18
66	Fluctuating interfaces subject to stochastic resetting. *Physical Review Letters*, **2014**, 112, 220601	7.4	77
65	Exact Record and Order Statistics of Random Walks via First-Passage Ideas **2014**, 226-251		10
64	On the gap and time interval between the first two maxima of long random walks. *Journal of Statistical Mechanics: Theory and Experiment*, **2014**, 2014, P09013	1.9	8

63	First Order Transition for the Optimal Search Time of Lévy Flights with Resetting. *Physical Review Letters*, **2014**, 113, 220602	7.4	152
62	Index distribution of Cauchy random matrices. *Journal of Physics A: Mathematical and Theoretical*, **2014**, 47, 055001	2	17
61	Universal statistics of longest lasting records of random walks and Lévy flights. *Journal of Physics A: Mathematical and Theoretical*, **2014**, 47, 255001	2	21
60	Reunion Probability of N Vicious Walkers: Typical and Large Fluctuations for Large N. *Journal of Statistical Physics*, **2013**, 150, 491-530	1.5	28
59	Exact statistics of the gap and time interval between the first two maxima of random walks and Lévy flights. *Physical Review Letters*, **2013**, 111, 070601	7.4	20
58	Near-extreme statistics of Brownian motion. *Physical Review Letters*, **2013**, 111, 240601	7.4	15
57	Anomalous fluctuations of currents in Sinai-type random chains with strongly correlated disorder. *Physical Review Letters*, **2013**, 110, 100602	7.4	29
56	Persistence and first-passage properties in nonequilibrium systems. *Advances in Physics*, **2013**, 62, 225-361	18.4	287
55	Large deviations of the top eigenvalue of large Cauchy random matrices. *Journal of Physics A: Mathematical and Theoretical*, **2013**, 46, 022001	2	17
54	Exact distributions of the number of distinct and common sites visited by N independent random walkers. *Physical Review Letters*, **2013**, 110, 220602	7.4	24
53	Asymmetric Lévy flights in the presence of absorbing boundaries. *Journal of Statistical Mechanics: Theory and Experiment*, **2013**, 2013, P10006	1.9	12
52	Extremes of N Vicious Walkers for Large N: Application to the Directed Polymer and KPZ Interfaces. *Journal of Statistical Physics*, **2012**, 149, 385-410	1.5	43
51	Lévy flights on the half line. *Physical Review E*, **2012**, 86, 011101	2.4	10
50	On the joint distribution of the maximum and its position of the Airy2 process minus a parabola. *Journal of Mathematical Physics*, **2012**, 53, 083303	1.2	27
49	Finite-temperature and finite-time scaling of the directed polymer free energy with respect to its geometrical fluctuations. *Physical Review E*, **2012**, 86, 031144	2.4	12
48	Record statistics for multiple random walks. *Physical Review E*, **2012**, 86, 011119	2.4	30
47	Universal order statistics of random walks. *Physical Review Letters*, **2012**, 108, 040601	7.4	28
46	Super-rough glassy phase of the random field XY model in two dimensions. *Physical Review Letters*, **2012**, 109, 157205	7.4	9

45	Record statistics and persistence for a random walk with a drift. *Journal of Physics A: Mathematical and Theoretical*, **2012**, 45, 355002	2	42
44	Non-intersecting Brownian walkers and Yang-Mills theory on the sphere. *Nuclear Physics B*, **2011**, 844, 500-526	2.8	84
43	First passages for a search by a swarm of independent random searchers. *Journal of Statistical Mechanics: Theory and Experiment*, **2011**, 2011, P06022	1.9	84
42	Proportionate vs disproportionate distribution of wealth of two individuals in a tempered Paretian ensemble. *Physica A: Statistical Mechanics and Its Applications*, **2011**, 390, 4340-4346	3.3	12
41	Distribution of the time at which N vicious walkers reach their maximal height. *Physical Review E*, **2011**, 83, 061146	2.4	26
40	Maximum relative height of elastic interfaces in random media. *Physical Review E*, **2011**, 84, 041131	2.4	7
39	Extreme value statistics from the real space renormalization group: Brownian motion, Bessel processes and continuous time random walks. *Journal of Statistical Mechanics: Theory and Experiment*, **2010**, 2010, P01009	1.9	32
38	Area distribution and the average shape of a Lévy bridge. *Journal of Statistical Mechanics: Theory and Experiment*, **2010**, 2010, P08005	1.9	7
37	Longest excursion of fractional Brownian motion: numerical evidence of non-Markovian effects. *Physical Review E*, **2010**, 81, 010102	2.4	18
36	Spontaneous symmetry breaking in a two-lane model for bidirectional overtaking traffic. *Journal of Statistical Mechanics: Theory and Experiment*, **2010**, 2010, P08024	1.9	12
35	Extremal statistics of curved growing interfaces in 1+1 dimensions. *Europhysics Letters*, **2010**, 91, 60006	1.6	37
34	Dynamic crossover in the persistence probability of manifolds at criticality. *Journal of Statistical Mechanics: Theory and Experiment*, **2010**, 2010, P12029	1.9	2
33	Universal nonstationary dynamics at the depinning transition. *Physical Review Letters*, **2009**, 103, 160602	7.4	20
32	Longest excursion of stochastic processes in nonequilibrium systems. *Physical Review Letters*, **2009**, 102, 240602	7.4	25
31	Maximum relative height of one-dimensional interfaces: from Rayleigh to Airy distribution. *Journal of Statistical Mechanics: Theory and Experiment*, **2009**, 2009, P09004	1.9	13
30	Collective dynamics of social annotation. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 10511-5	11.5	83
29	Condensation of the Roots of Real Random Polynomials on the Real Axis. *Journal of Statistical Physics*, **2009**, 135, 587-598	1.5	5
28	Domain walls and chaos in the disordered SOS model. *Journal of Statistical Mechanics: Theory and Experiment*, **2009**, 2009, P08022	1.9	19

27	Sylvester□question and the random acceleration process. *Journal of Statistical Mechanics: Theory and Experiment*, **2008**, 2008, P10010	1.9	8
26	Dynamics of annihilation. II. Fluctuations of global quantities. *Physical Review E*, **2008**, 77, 051128	2.4	6
25	Dynamics of annihilation. I. Linearized Boltzmann equation and hydrodynamics. *Physical Review E*, **2008**, 77, 051127	2.4	9
24	Exact distribution of the maximal height of p vicious walkers. *Physical Review Letters*, **2008**, 101, 150601	7.4	73
23	Finite temperature behavior of strongly disordered quantum magnets coupled to a dissipative bath. *Journal of Statistical Mechanics: Theory and Experiment*, **2008**, 2008, P04012	1.9	16
22	Computer Simulations of Phase Transitions and Dynamics in Confined Systems. *Zeitschrift Fur Physikalische Chemie*, **2008**, 222, 433-469	3.1	
21	Real Roots of Random Polynomials and Zero Crossing Properties of Diffusion Equation. *Journal of Statistical Physics*, **2008**, 132, 235-273	1.5	23
20	Computer Simulations of Phase Transitions and Dynamics in Confined Systems **2008**, 209-245		
19	A note on q-Gaussians and non-Gaussians in statistical mechanics. *Journal of Statistical Mechanics: Theory and Experiment*, **2007**, 2007, P06003-P06003	1.9	49
18	Dynamic crossover in the global persistence at criticality. *Europhysics Letters*, **2007**, 78, 10007	1.6	12
17	Disordered free fermions and the Cardy-Ostlund fixed line at low temperature. *Physical Review B*, **2007**, 75,	3.3	7
16	Statistics of the number of zero crossings: from random polynomials to the diffusion equation. *Physical Review Letters*, **2007**, 99, 060603	7.4	14
15	Superaging in two-dimensional random ferromagnets. *Physical Review E*, **2007**, 75, 030104	2.4	31
14	Strong-disorder fixed point in the dissipative random transverse-field Ising model. *Physical Review Letters*, **2006**, 96, 227201	7.4	27
13	Universal asymptotic statistics of maximal relative height in one-dimensional solid-on-solid models. *Physical Review E*, **2006**, 73, 056103	2.4	52
12	Non-equilibrium critical dynamics in disordered ferromagnets. *Journal of Physics: Conference Series*, **2006**, 40, 27-35	0.3	11
11	Functional renormalization for pinned elastic systems away from their steady states. *Europhysics Letters*, **2005**, 71, 290-296	1.6	21
10	Non-Markovian persistence in the diluted Ising model at criticality. *Europhysics Letters*, **2005**, 72, 719-725	1.6	7

9	Nonequilibrium dynamics below the super-roughening transition. *Physical Review B*, **2005**, 71,	3.3	16
8	Universal aging properties at a disordered critical point. *Physical Review E*, **2005**, 72, 016105	2.4	29
7	Low-temperature specific heat of some quantum mean-field glassy phases. *Physical Review B*, **2005**, 71,	3.3	7
6	Aging in the glass phase of a two-dimensional random periodic elastic system. *Physical Review Letters*, **2004**, 93, 217201	7.4	23
5	Specific heat of the quantum Bragg glass. *Europhysics Letters*, **2004**, 66, 538-544	1.6	5
4	Specific heat of classical disordered elastic systems. *Physical Review Letters*, **2003**, 91, 117002	7.4	8
3	Exact multilocal renormalization of the effective action: application to the random sine Gordon model statics and nonequilibrium dynamics. *Physical Review E*, **2003**, 68, 046101	2.4	26
2	Distribution of the time of the maximum for stationary processes. *Europhysics Letters*,	1.6	2
1	Truncated linear statistics in the one dimensional one-component plasma. *Journal of Physics A: Mathematical and Theoretical*,	2	4