Benjamin Doyon

List of Publications by Year
in descending order

72 papers	3,939 citations	117625 34 h-index	123424 61 g-index
72 all docs	72 docs citations	72 times ranked	946 citing authors

#	Article	IF	Citations
1	Introduction to the Special Issue on Emergent Hydrodynamics in Integrable Many-Body Systems. Journal of Statistical Mechanics: Theory and Experiment, 2022, 2022, 014001.	2.3	37
2	Diffusion and Superdiffusion from Hydrodynamic Projections. Journal of Statistical Physics, 2022, 186, 1.	1.2	4
3	Hydrodynamic Projections and the Emergence of Linearised Euler Equations in One-Dimensional Isolated Systems. Communications in Mathematical Physics, 2022, 391, 293-356.	2.2	15
4	Correlation functions and transport coefficients in generalised hydrodynamics. Journal of Statistical Mechanics: Theory and Experiment, 2022, 2022, 014002.	2.3	34
5	Tails of Instability and Decay: a Hydrodynamic Perspective. SciPost Physics, 2022, 12, .	4.9	3
6	Generalised hydrodynamics of particle creation and decay. Journal of High Energy Physics, 2022, 2022, 1.	4.7	1
7	$$ T\overline{T} $$ deformations and the width of fundamental particles. Journal of High Energy Physics, 2022, 2022, .	4.7	16
8	The hydrodynamic theory of dynamical correlation functions in the XX chain. Journal of Statistical Mechanics: Theory and Experiment, 2022, 2022, 053102.	2.3	6
9	Free energy fluxes and the Kubo–Martin–Schwinger relation. Journal of Statistical Mechanics: Theory and Experiment, 2021, 2021, 043206.	2.3	6
10	Euler-scale dynamical fluctuations in non-equilibrium interacting integrable systems. SciPost Physics, 2021, 10, .	4.9	15
11	Nonequilibrium Dynamics and Weakly Broken Integrability. Physical Review Letters, 2021, 127, 130601.	7.8	32
12	Fluctuations in Ballistic Transport from Euler Hydrodynamics. Annales Henri Poincare, 2020, 21, 255-302.	1.7	37
13	On the hydrodynamics of unstable excitations. Journal of High Energy Physics, 2020, 2020, 1.	4.7	7
14	Thermalization of a Trapped One-Dimensional Bose Gas via Diffusion. Physical Review Letters, 2020, 125, 240604.	7.8	43
15	Quantum Generalized Hydrodynamics. Physical Review Letters, 2020, 124, 140603.	7.8	89
16	Transport fluctuations in integrable models out of equilibrium. SciPost Physics, 2020, 8, .	4.9	34
17	Euler-scale dynamical correlations in integrable systems with fluid motion. SciPost Physics Core, 2020, 3, .	2.8	20
18	Generalized hydrodynamics of the classical Toda system. Journal of Mathematical Physics, 2019, 60, 073302.	1.1	52

#	ARTICLE	IF	CITATIONS
19	Entanglement content of quantum particle excitations. III. Graph partition functions. Journal of Mathematical Physics, 2019, 60, .	1.1	19
20	Entanglement content of quantum particle excitations. Part II. Disconnected regions and logarithmic negativity. Journal of High Energy Physics, 2019, 2019, 1.	4.7	23
21	Diffusion in generalized hydrodynamics and quasiparticle scattering. SciPost Physics, 2019, 6, .	4.9	131
22	Hydrodynamics of the interacting Bose gas in the Quantum Newton Cradle setup. SciPost Physics, 2019, 6, .	4.9	70
23	Soliton Gases and Generalized Hydrodynamics. Physical Review Letters, 2018, 120, 045301.	7.8	143
24	A geometric viewpoint on generalized hydrodynamics. Nuclear Physics B, 2018, 926, 570-583.	2.5	83
25	Entanglement content of quantum particle excitations. Part I. Free field theory. Journal of High Energy Physics, 2018, 2018, 1.	4.7	28
26	Entanglement Content of Quasiparticle Excitations. Physical Review Letters, 2018, 121, 170602.	7.8	42
27	Hydrodynamic Diffusion in Integrable Systems. Physical Review Letters, 2018, 121, 160603.	7.8	166
28	Conical twist fields and null polygonal Wilson loops. Nuclear Physics B, 2018, 931, 146-178.	2.5	9
29	Generalized hydrodynamics of classical integrable field theory: the sinh-Gordon model. SciPost Physics, 2018, 4, .	4.9	80
30	Exact large-scale correlations in integrable systems out of equilibrium. , 2018, 5, .		77
31	Diffusion and Signatures of Localization in Stochastic Conformal Field Theory. Physical Review Letters, 2017, 119, 110201.	7.8	15
32	Large-Scale Description of Interacting One-Dimensional Bose Gases: Generalized Hydrodynamics Supersedes Conventional Hydrodynamics. Physical Review Letters, 2017, 119, 195301.	7.8	121
33	Thermalization and Pseudolocality in Extended Quantum Systems. Communications in Mathematical Physics, 2017, 351, 155-200.	2.2	52
34	Expectation values of twist fields and universal entanglement saturation of the free massive boson. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 274001.	2.1	9
35	Dynamics of hard rods with initial domain wall state. Journal of Statistical Mechanics: Theory and Experiment, 2017, 2017, 073210.	2.3	95
36	A note on generalized hydrodynamics: inhomogeneous fields and other concepts. SciPost Physics, 2017, 2, .	4.9	137

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37	Drude Weight for the Lieb-Liniger Bose Gas. SciPost Physics, 2017, 3, .	4.9	120
38	A hydrodynamic approach to non-equilibrium conformal field theories. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 033104.	2.3	37
39	Emergent Hydrodynamics in Integrable Quantum Systems Out of Equilibrium. Physical Review X, 2016, 6, .	8.9	446
40	Shock waves, rarefaction waves, and nonequilibrium steady states in quantum critical systems. Physical Review D, 2016, 94, .	4.7	21
41	Conformal field theory out of equilibrium: a review. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 064005.	2.3	121
42	Monte Carlo method for critical systems in infinite volume: The planar Ising model. Physical Review E, 2016, 94, 043322.	2.1	5
43	Universal scaling of the logarithmic negativity in massive quantum field theory. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 125401.	2.1	49
44	Entanglement negativity and entropy in non-equilibrium conformal field theory. Nuclear Physics B, 2015, 898, 78-112.	2.5	63
45	Energy flow in quantum critical systems far from equilibrium. Nature Physics, 2015, 11, 509-514.	16.7	78
46	Non-equilibrium steady states in the Klein–Gordon theory. Journal of Physics A: Mathematical and Theoretical, 2015, 48, 095002.	2.1	68
47	Lower bounds for ballistic current and noise in non-equilibrium quantum steady states. Nuclear Physics B, 2015, 892, 190-210.	2.5	23
48	Entanglement entropy of non-unitary integrable quantum field theory. Nuclear Physics B, 2015, 896, 835-880.	2.5	27
49	Non-Equilibrium Steady States in Conformal Field Theory. Annales Henri Poincare, 2015, 16, 113-161.	1.7	90
50	Form factors in equilibrium and non-equilibrium mixed states of the Ising model. Journal of Statistical Mechanics: Theory and Experiment, 2014, 2014, P09021.	2.3	10
51	Random loops and conformal field theory. Journal of Statistical Mechanics: Theory and Experiment, 2014, 2014, P02015.	2.3	4
52	Energy flow and fluctuations in non-equilibrium conformal field theory on star graphs. Journal of Statistical Mechanics: Theory and Experiment, 2014, 2014, P03002.	2.3	15
53	Thermodynamic Bethe ansatz for non-equilibrium steady states: exact energy current and fluctuations in integrable QFT. Journal of Statistical Mechanics: Theory and Experiment, 2014, 2014, P03011.	2.3	33
54	Conformal Loop Ensembles and the Stress–Energy Tensor. Letters in Mathematical Physics, 2013, 103, 233-284.	1.1	13

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55	Nonequilibrium thermal transport in the quantum Ising chain. Physical Review B, 2013, 88, .	3.2	73
56	Time-reversal symmetry and fluctuation relations in non-equilibrium quantum steady states. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 372001.	2.1	33
57	Universal corrections to the entanglement entropy in gapped quantum spin chains: A numerical study. Physical Review B, 2013, 88, .	3.2	10
58	Hypotrochoids in conformal restriction systems and Virasoro descendants. Journal of Statistical Mechanics: Theory and Experiment, 2013, 2013, P09008.	2.3	2
59	Calculus on manifolds of conformal maps and CFT. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 315202.	2.1	5
60	Energy flow in non-equilibrium conformal field theory. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 362001.	2.1	131
61	Entanglement Entropy of Highly Degenerate States and Fractal Dimensions. Physical Review Letters, 2012, 108, 120401.	7.8	40
62	Full counting statistics in the resonant-level model. Journal of Mathematical Physics, 2012, 53, .	1.1	20
63	Permutation operators, entanglement entropy, and the XXZ spin chain in the limit Delta o-1^+. Journal of Statistical Mechanics: Theory and Experiment, 2011, 2011, P02001.	2.3	26
64	Bipartite Entanglement Entropy in Massive Two-Dimensional Quantum Field Theory. Physical Review Letters, 2009, 102, 031602.	7.8	44
65	Bi-partite Entanglement Entropy in Massive QFT withÂaÂBoundary: the Ising Model. Journal of Statistical Physics, 2009, 134, 105-145.	1.2	41
66	Entanglement entropy in extended quantum systems. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 500301.	2.1	231
67	New Method for Studying Steady States in Quantum Impurity Problems: The Interacting Resonant Level Model. Physical Review Letters, 2007, 99, 076806.	7.8	65
68	Finite-Temperature Form Factors: a Review. Symmetry, Integrability and Geometry: Methods and Applications (SIGMA), 2007, , .	0.5	17
69	Universal aspects of nonequilibrium currents in a quantum dot. Physical Review B, 2006, 73, .	3.2	90
70	Finite-temperature form factors in the free Majorana theory. Journal of Statistical Mechanics: Theory and Experiment, 2005, 2005, P11006-P11006.	2.3	32
71	Twisted Modules for Vertex Operator Algebras. , 0, , 144-187.		2
72	Lecture notes on Generalised Hydrodynamics. SciPost Physics Lecture Notes, 0, , .	0.0	103