

François Foucart

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9391976/publications.pdf>

Version: 2024-02-01

71
papers

4,406
citations

71102

41
h-index

102487

66
g-index

72
all docs

72
docs citations

72
times ranked

3536
citing authors

#	ARTICLE	IF	CITATIONS
1	Data-driven Expectations for Electromagnetic Counterpart Searches Based on LIGO/Virgo Public Alerts. <i>Astrophysical Journal</i> , 2022, 924, 54.	4.5	56
2	Black Hole-Neutron Star Mergers. , 2022, , 611-660.		0
3	Optical follow-up of the neutron star–black hole mergers S200105ae and S200115j. <i>Nature Astronomy</i> , 2021, 5, 46-53.	10.1	71
4	High-accuracy waveforms for black hole-neutron star systems with spinning black holes. <i>Physical Review D</i> , 2021, 103, .	4.7	10
5	Statistical and systematic uncertainties in extracting the source properties of neutron star-black hole binaries with gravitational waves. <i>Physical Review D</i> , 2021, 103, .	4.7	12
6	Electromagnetic Signatures from the Tidal Tail of a Black Hole–Neutron Star Merger. <i>Astrophysical Journal</i> , 2021, 915, 69.	4.5	19
7	Spin effects on neutron star fundamental-mode dynamical tides: Phenomenology and comparison to numerical simulations. <i>Physical Review Research</i> , 2021, 3, .	3.6	35
8	Implementation of Monte Carlo Transport in the General Relativistic SpEC Code. <i>Astrophysical Journal</i> , 2021, 920, 82.	4.5	16
9	The Relative Contribution to Heavy Metals Production from Binary Neutron Star Mergers and Neutron Star–Black Hole Mergers. <i>Astrophysical Journal Letters</i> , 2021, 920, L3.	8.3	10
10	Estimating outflow masses and velocities in merger simulations: Impact of r -process heating and neutrino cooling. <i>Physical Review D</i> , 2021, 104, .	4.7	19
11	The Challenges Ahead for Multimessenger Analyses of Gravitational Waves and Kilonova: A Case Study on GW190425. <i>Astrophysical Journal</i> , 2021, 922, 269.	4.5	35
12	Aligned-spin neutron-star–black-hole waveform model based on the effective-one-body approach and numerical-relativity simulations. <i>Physical Review D</i> , 2020, 102, .	4.7	51
13	Implications of the search for optical counterparts during the second part of the Advanced LIGO’s and Advanced Virgo’s third observing run: lessons learned for future follow-up observations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 497, 1181-1196.	4.4	39
14	The landscape of disc outflows from black hole–neutron star mergers. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 497, 3221-3233.	4.4	51
15	Comparison of momentum transport models for numerical relativity. <i>Physical Review D</i> , 2020, 102, .	4.7	10
16	Estimates for disk and ejecta masses produced in compact binary mergers. <i>Physical Review D</i> , 2020, 101, .	4.7	88
17	A Brief Overview of Black Hole-Neutron Star Mergers. <i>Frontiers in Astronomy and Space Sciences</i> , 2020, 7, .	2.8	35
18	Unequal mass binary neutron star simulations with neutrino transport: Ejecta and neutrino emission. <i>Physical Review D</i> , 2020, 101, .	4.7	38

#	ARTICLE	IF	CITATIONS
19	Implications of the search for optical counterparts during the first six months of the Advanced LIGO [™] s and Advanced Virgo [™] s third observing run: possible limits on the ejecta mass and binary properties. Monthly Notices of the Royal Astronomical Society, 2020, 492, 863-876.	4.4	71
20	Axisymmetric hydrodynamics in numerical relativity using a multipatch method. Classical and Quantum Gravity, 2020, 37, 235010.	4.0	2
21	GROWTH on S190814bv: Deep Synoptic Limits on the Optical/Near-infrared Counterpart to a Neutron Star [€] Black Hole Merger. Astrophysical Journal, 2020, 890, 131.	4.5	74
22	Monte-Carlo Neutrino Transport in Neutron Star Merger Simulations. Astrophysical Journal Letters, 2020, 902, L27.	8.3	50
23	Numerical simulations of neutron star-black hole binaries in the near-equal-mass regime. Physical Review D, 2019, 99, .	4.7	53
24	The role of magnetic field geometry in the evolution of neutron star merger accretion discs. Monthly Notices of the Royal Astronomical Society, 2019, 490, 4811-4825.	4.4	102
25	Imprints of r-process heating on fall-back accretion: distinguishing black hole [€] neutron star from double neutron star mergers. Monthly Notices of the Royal Astronomical Society, 2019, 485, 4404-4412.	4.4	35
26	Systematic effects from black hole-neutron star waveform model uncertainties on the neutron star equation of state. Physical Review D, 2019, 99, .	4.7	8
27	Gravitational waveforms from spectral Einstein code simulations: Neutron star-neutron star and low-mass black hole-neutron star binaries. Physical Review D, 2019, 99, .	4.7	41
28	Distinguishing the nature of comparable-mass neutron star binary systems with multimessenger observations: GW170817 case study. Physical Review D, 2019, 100, .	4.7	54
29	Smooth equations of state for high-accuracy simulations of neutron star binaries. Physical Review D, 2019, 100, .	4.7	10
30	Long-term GRMHD simulations of neutron star merger accretion discs: implications for electromagnetic counterparts. Monthly Notices of the Royal Astronomical Society, 2019, 482, 3373-3393.	4.4	207
31	Elastic scattering in general relativistic ray tracing for neutrinos. Physical Review D, 2018, 98, .	4.7	7
32	Evaluating radiation transport errors in merger simulations using a Monte [^] Carlo algorithm. Physical Review D, 2018, 98, .	4.7	48
33	Black hole-neutron star mergers using a survey of finite-temperature equations of state. Physical Review D, 2018, 98, .	4.7	22
34	Remnant baryon mass in neutron star-black hole mergers: Predictions for binary neutron star mimickers and rapidly spinning black holes. Physical Review D, 2018, 98, .	4.7	146
35	Monte Carlo closure for moment-based transport schemes in general relativistic radiation hydrodynamic simulations. Monthly Notices of the Royal Astronomical Society, 2018, 475, 4186-4207.	4.4	41
36	Heating of accretion-disk coronae and jets by general relativistic magnetohydrodynamic turbulence. Journal of Plasma Physics, 2018, 84, .	2.1	12

#	ARTICLE	IF	CITATIONS
37	Evolution of the magnetized, neutrino-cooled accretion disk in the aftermath of a black hole-neutron star binary merger. <i>Physical Review D</i> , 2018, 97, .	4.7	27
38	SpECTRE: A task-based discontinuous Galerkin code for relativistic astrophysics. <i>Journal of Computational Physics</i> , 2017, 335, 84-114.	3.8	77
39	grim: A Flexible, Conservative Scheme for Relativistic Fluid Theories. <i>Astrophysical Journal</i> , 2017, 837, 92.	4.5	19
40	How important is non-ideal physics in simulations of sub-Eddington accretion on to spinning black holes?. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 470, 2240-2252.	4.4	38
41	The influence of neutrinos on r-process nucleosynthesis in the ejecta of black hole–neutron star mergers. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 464, 3907-3919.	4.4	64
42	Signatures of hypermassive neutron star lifetimes on r-process nucleosynthesis in the disc ejecta from neutron star mergers. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 472, 904-918.	4.4	152
43	Dynamical ejecta from precessing neutron star-black hole mergers with a hot, nuclear-theory based equation of state. <i>Classical and Quantum Gravity</i> , 2017, 34, 044002.	4.0	62
44	Dynamics, nucleosynthesis, and kilonova signature of black hole–neutron star merger ejecta. <i>Classical and Quantum Gravity</i> , 2017, 34, 154001.	4.0	82
45	Impact of an improved neutrino energy estimate on outflows in neutron star merger simulations. <i>Physical Review D</i> , 2016, 94, .	4.7	113
46	Low mass binary neutron star mergers: Gravitational waves and neutrino emission. <i>Physical Review D</i> , 2016, 93, .	4.7	157
47	Simulations of inspiraling and merging double neutron stars using the Spectral Einstein Code. <i>Physical Review D</i> , 2016, 93, .	4.7	39
48	Effects of Neutron-Star Dynamic Tides on Gravitational Waveforms within the Effective-One-Body Approach. <i>Physical Review Letters</i> , 2016, 116, 181101.	7.8	204
49	Initial data for high-compactness black hole–neutron star binaries. <i>Classical and Quantum Gravity</i> , 2016, 33, 105009.	4.0	5
50	Initial data for black hole–neutron star binaries, with rotating stars. <i>Classical and Quantum Gravity</i> , 2016, 33, 225012.	4.0	10
51	Evolution of accretion discs around a Kerr black hole using extended magnetohydrodynamics. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 456, 1332-1345.	4.4	46
52	AN EXTENDED MAGNETOHYDRODYNAMICS MODEL FOR RELATIVISTIC WEAKLY COLLISIONAL PLASMAS. <i>Astrophysical Journal</i> , 2015, 810, 162.	4.5	43
53	Post-merger evolution of a neutron star-black hole binary with neutrino transport. <i>Physical Review D</i> , 2015, 91, .	4.7	124
54	Binary neutron stars with arbitrary spins in numerical relativity. <i>Physical Review D</i> , 2015, 92, .	4.7	41

#	ARTICLE	IF	CITATIONS
55	Improvements to the construction of binary black hole initial data. Classical and Quantum Gravity, 2015, 32, 245010.	4.0	28
56	Evolution of linear warps in accretion discs and applications to protoplanetary discs in binaries. Monthly Notices of the Royal Astronomical Society, 2014, 445, 1731-1744.	4.4	66
57	Magnetic effects on the low- T/W instability in differentially rotating neutron stars. Physical Review D, 2014, 90, .	4.7	28
58	Neutron star-black hole mergers with a nuclear equation of state and neutrino cooling: Dependence in the binary parameters. Physical Review D, 2014, 90, .	4.7	132
59	Massive disc formation in the tidal disruption of a neutron star by a nearly extremal black hole. Classical and Quantum Gravity, 2013, 30, 135004.	4.0	66
60	BLACK HOLE-NEUTRON STAR MERGERS WITH A HOT NUCLEAR EQUATION OF STATE: OUTFLOW AND NEUTRINO-COOLED DISK FOR A LOW-MASS, HIGH-SPIN CASE. Astrophysical Journal, 2013, 776, 47.	4.5	83
61	First direct comparison of nondisrupting neutron star-black hole and binary black hole merger simulations. Physical Review D, 2013, 88, .	4.7	56
62	Black-hole-neutron-star mergers at realistic mass ratios: Equation of state and spin orientation effects. Physical Review D, 2013, 87, .	4.7	134
63	ASSEMBLY OF PROTOPLANETARY DISKS AND INCLINATIONS OF CIRCUMBINARY PLANETS. Astrophysical Journal, 2013, 764, 106.	4.5	64
64	Black-hole-neutron-star mergers: Disk mass predictions. Physical Review D, 2012, 86, .	4.7	190
65	Black hole-neutron star mergers for $10 < M_{\text{BH}} < M_{\text{NS}}$ holes. Physical Review D, 2012, 85, .		
66	Evolution of spin direction of accreting magnetic protostars and spin-orbit misalignment in exoplanetary systems. Monthly Notices of the Royal Astronomical Society, 2011, 412, 2790-2798.	4.4	158
67	Evolution of spin direction of accreting magnetic protostars and spin-orbit misalignment in exoplanetary systems - II. Warped discs. Monthly Notices of the Royal Astronomical Society, 2011, 412, 2799-2815.	4.4	74
68	Black hole-neutron star mergers: Effects of the orientation of the black hole spin. Physical Review D, 2011, 83, .	4.7	103
69	Equation of state effects in black hole-neutron star mergers. Classical and Quantum Gravity, 2010, 27, 114106.	4.0	76
70	Evolving black hole-neutron star binaries in general relativity using pseudospectral and finite difference methods. Physical Review D, 2008, 78, .	4.7	133
71	Initial data for black hole-neutron star binaries: A flexible, high-accuracy spectral method. Physical Review D, 2008, 77, .	4.7	77