Katherine Freese

List of Publications by Year
in descending order

92 papers	6,964 citations	117625 34 h-index	56724 83 g-index
92 all docs	92 docs citations	92 times ranked	4070 citing authors

#	Article	IF	Citations
1	Natural Chain Inflation. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 829, 137081.	4.1	2
2	Power spectrum of density perturbations in chain inflation. Physical Review D, 2021, 103, .	4.7	5
3	Stability and pulsation of the first dark stars. Monthly Notices of the Royal Astronomical Society, 2021, 503, 3677-3691.	4.4	3
4	New Projections for Dark Matter Searches with Paleo-Detectors. Instruments, 2021, 5, 21.	1.8	7
5	Filling the black hole mass gap: Avoiding pair instability in massive stars through addition of nonnuclear energy. Physical Review D, 2021, 104, .	4.7	16
6	Inelastic dark matter scattering off Thallium cannot save DAMA. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 070.	5.4	3
7	Chain early dark energy: A Proposal for solving the Hubble tension and explaining todayâ€™s dark energy. Physical Review D, 2021, 104, .	4.7	27
8	Using action space clustering to constrain the recent accretion history of Milky Way-like galaxies. Monthly Notices of the Royal Astronomical Society, 2021, 509, 5882-5901.	4.4	11
9	Large density perturbations from reheating to standard model particles due to the dynamics of the Higgs boson during inflation. Physical Review D, 2021, 104, .	4.7	6
10	Paleodetectors for Galactic supernova neutrinos. Physical Review D, 2020, 101, .	4.7	14
11	Cornering (quasi) degenerate neutrinos with cosmology. Journal of High Energy Physics, 2020, 2020, 1.	4.7	4
12	CMB <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>B</mml:mi></mml:math> -mode non-Gaussianity: Optimal bispectrum estimator and Fisher forecasts. Physical Review D, 2020, 102, .	4.7	13
13	Searching for dark matter with paleo-detectors. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 803, 135325.	4.1	22
14	Probing the nature of dark matter with accreted globular cluster streams. Monthly Notices of the Royal Astronomical Society, 2020, 501, 179-200.	4.4	33
15	Waves from the centre: probing PBH and other macroscopic dark matter with LISA. European Physical Journal C, 2020, 80, 1.	3.9	8
16	Uncertainties in direct dark matter detection in light of Gaia's escape velocity measurements. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 034-034.	5.4	16
17	Testing the rotational nature of the supermassive object M87* from the circularity and size of its first image. Physical Review D, 2019, 100, .	4.7	253
18	The NMSSM is within reach of the LHC: mass correlations & decay signatures. Journal of High Energy Physics, 2019, 2019, 1.	4.7	22

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19	The Simons Observatory: science goals and forecasts. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 056-056.	5.4	741
20	Digging for dark matter: Spectral analysis and discovery potential of paleo-detectors. Physical Review D, 2019, 99, .	4.7	21
21	Paleo-detectors: Searching for dark matter with ancient minerals. Physical Review D, 2019, 99, .	4.7	28
22	On stochastic effects and primordial black-hole formation. European Physical Journal C, 2019, 79, 1.	3.9	10
23	Dark Matter implications of DAMA/LIBRA-phase2 results. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 789, 262-269.	4.1	48
24	Determining dark matter properties with a XENONnT/LZ signal and LHC RunÂ3 monojet searches. Physical Review D, 2018, 97, .	4.7	18
25	Examining the time dependence of DAMAâ€™s modulation amplitude. European Physical Journal C, 2018, 78, 1.	3.9	4
26	Scale-dependent galaxy bias, CMB lensing-galaxy cross-correlation, and neutrino masses. Physical Review D, 2018, 98, .	4.7	73
27	Constraints on the sum of the neutrino masses in dynamical dark energy models with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>w</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mi>z</mml:mi><mml:mo) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 417 Td (stretchy="false">) [illegible] are tighter than those obtained in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" disp	4.7	14
28	The Higgs boson can delay reheating after inflation. Journal of Cosmology and Astroparticle Physics, 2018, 2018, 067-067.	5.4	29
29	Dark matter capture, subdominant WIMPs, and neutrino observatories. Physical Review D, 2017, 95, .	4.7	27
30	Status of dark matter in the universe. International Journal of Modern Physics D, 2017, 26, 1730012.	2.1	64
31	NMSSM Higgs boson search strategies at the LHC and the mono-Higgs signature in particular. Physical Review D, 2017, 95, .	4.7	24
32	Status of dark matter in the universe. , 2017, , .		7
33	Unveiling <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î½</mml:mi></mml:math> secrets with cosmological data: Neutrino masses and mass hierarchy. Physical Review D, 2017, 96, .	4.7	277
34	Impact of neutrino properties on the estimation of inflationary parameters from current and future observations. Physical Review D, 2017, 95, .	4.7	70
35	Constraints on primordial black holes with extended mass functions. Physical Review D, 2017, 95, .	4.7	92
36	Dark stars: a review. Reports on Progress in Physics, 2016, 79, 066902.	20.1	39

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37	The impact of baryons on the direct detection of dark matter. Journal of Cosmology and Astroparticle Physics, 2016, 2016, 071-071.	5.4	49
38	Gamma rays from muons from WIMPs: Implementation of radiative muon decays for dark matter analyses. Physical Review D, 2016, 93, .	4.7	7
39	Improvement of cosmological neutrino mass bounds. Physical Review D, 2016, 94, .	4.7	136
40	Natural inflation: consistency with cosmic microwave background observations of Planck and BICEP2. Journal of Cosmology and Astroparticle Physics, 2015, 2015, 044-044.	5.4	56
41	<i>Colloquium</i>: Annual modulation of dark matter. Reviews of Modern Physics, 2013, 85, 1561-1581.	45.6	250
42	Gamma-ray constraints on the first stars from annihilation of light WIMPs. Physical Review D, 2012, 85, .	4.7	5
43	Dark matter collisions with the human body. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 717, 25-28.	4.1	5
44	Observing supermassive dark stars with James Webb Space Telescope. Monthly Notices of the Royal Astronomical Society, 2012, 422, 2164-2186.	4.4	27
45	Predictive signatures of supersymmetry: Measuring the dark matter mass and gluino mass with early LHC data. Physical Review D, 2011, 84, .	4.7	22
46	Probing dark matter streams with CoGeNT. Physical Review D, 2011, 84, .	4.7	19
47	Probing EWSB naturalness in unified SUSY models with dark matter. Journal of High Energy Physics, 2011, 2011, 1.	4.7	10
48	XENON10/100 dark matter constraints in comparison with CoGeNT and DAMA: Examining theLeffdependence. Physical Review D, 2011, 83, .	4.7	71
49	Supermassive Dark Stars: Detectable by JWST and HST. , 2010, , .		3
50	Positrons in cosmic rays from dark matter annihilations for uplifted Higgs regions in the MSSM. Physical Review D, 2010, 81, .	4.7	7
51	High-energy neutrino signatures of dark matter. Physical Review D, 2010, 81, .	4.7	22
52	Sensitivity of the IceCube neutrino detector to dark matter annihilating in dwarf galaxies. Physical Review D, 2010, 81, .	4.7	18
53	Cascade events at IceCube + DeepCore as a definitive constraint on the dark matter interpretation of the PAMELA and Fermi anomalies. Physical Review D, 2010, 81, .	4.7	28
54	Dark stars: a new study of the first stars in the Universe. New Journal of Physics, 2009, 11, 105014.	2.9	12

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55	Are we seeing the beginnings of inflation?. Physical Review D, 2009, 80, .	4.7	5
56	Accretion process onto super-spinning objects. Physical Review D, 2009, 80, .	4.7	39
57	Dark matter in the MSSM golden region. Physical Review D, 2009, 79, .	4.7	4
58	NATURAL INFLATION: STATUS AFTER WMAP THREE-YEAR DATA. , 2009, , 707-719.		0
59	The Effect of Dark Matter on the First Stars: A New Phase of Stellar Evolution. , 2008, , .		8
60	Dark Stars: Dark matter in the first stars leads to a new phase of stellar evolution. Proceedings of the International Astronomical Union, 2008, 4, 56-60.	0.0	1
61	NATURAL INFLATION: STATUS AFTER WMAP THREE-YEAR DATA. International Journal of Modern Physics D, 2007, 16, 2573-2585.	2.1	16
62	Natural inflation: Status after WMAP 3-year data. Physical Review D, 2006, 74, .	4.7	58
63	The dark side of the universe. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 559, 337-340.	1.6	3
64	Annual modulation of dark matter in the presence of streams. Physical Review D, 2006, 74, .	4.7	131
65	Chain inflation in the landscape: â€˜bubble bubble toil and troubleâ€™. Journal of Cosmology and Astroparticle Physics, 2005, 2005, 007-007.	5.4	54
66	Radiative corrections to the inflaton potential as an explanation of suppressed large scale power in density perturbations and the cosmic microwave background. Journal of Cosmology and Astroparticle Physics, 2005, 2005, 003-003.	5.4	9
67	Holes in the walls: Primordial black holes as a solution to the cosmological domain wall problem. Physical Review D, 2005, 72, .	4.7	40
68	Detectability of weakly interacting massive particles in the Sagittarius dwarf tidal stream. Physical Review D, 2005, 71, .	4.7	108
69	Phase of the annual modulation as a tool for determining the mass of the weakly interacting massive particle. Physical Review D, 2004, 70, .	4.7	27
70	Can WIMP spin dependent couplings explain DAMA data, in light of null results from other experiments?. Physical Review D, 2004, 70, .	4.7	96
71	Effects of the Sagittarius Dwarf Tidal Stream on Dark Matter Detectors. Physical Review Letters, 2004, 92, 111301.	7.8	114
72	On natural inflation. Physical Review D, 2004, 70, .	4.7	60

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73	Lensed density perturbations in braneworlds: Towards an alternative to perturbations from inflation. Physical Review D, 2003, 67, .	4.7	8
74	Future Type Ia Supernova Data as Tests of Dark Energy from Modified Friedmann Equations. Astrophysical Journal, 2003, 594, 25-32.	4.5	81
75	THE POSITRON EXCESS AND SUPERSYMMETRIC DARK MATTER. , 2003, , .		0
76	On the direct detection of extragalactic weakly interacting massive particles. Physical Review D, 2001, 64, .	4.7	18
77	Death of Stellar Baryonic Dark Matter. , 2001, , .		1
78	Baryogenesis during reheating in natural inflation and comments on spontaneous baryogenesis. Physical Review D, 1997, 56, 6155-6165.	4.7	66
79	Indirect detection of a light Higgsino motivated by collider data. Physical Review D, 1997, 55, 1771-1776.	4.7	18
80	Moduli inflation with large scale structure produced by topological defects. Physical Review D, 1996, 54, 6083-6087.	4.7	15
81	Calculation of particle production by Nambu-Goldstone bosons with application to inflation reheating and baryogenesis. Physical Review D, 1995, 51, 2693-2702.	4.7	65
82	Scalar field potential in inflationary models: Reconstruction and further constraints. Physical Review D, 1995, 51, 6722-6735.	4.7	15
83	Coupling of pseudo Nambu-Goldstone bosons to other scalars and its role in double field inflation. Physical Review D, 1994, 50, 7731-7734.	4.7	12
84	Natural inflation: Particle physics models, power-law spectra for large-scale structure, and constraints from the Cosmic Background Explorer. Physical Review D, 1993, 47, 426-455.	4.7	473
85	Natural Inflation. Annals of the New York Academy of Sciences, 1991, 647, 715-726.	3.8	4
86	Constraints on the scalar-field potential in inflationary models. Physical Review D, 1991, 43, 965-976.	4.7	84
87	Double-field inflation. Physical Review D, 1991, 43, 353-361.	4.7	88
88	Natural inflation with pseudo Nambu-Goldstone bosons. Physical Review Letters, 1990, 65, 3233-3236.	7.8	1,019
89	Probing the Earth with weakly interacting massive particles. Physical Review D, 1989, 39, 1029-1045.	4.7	17
90	Signal modulation in cold-dark-matter detection. Physical Review D, 1988, 37, 3388-3405.	4.7	401

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91	Can scalar neutrinos or massive Dirac neutrinos be the missing mass?. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1986, 167, 295-300.	4.1	186
92	Detecting cold dark-matter candidates. Physical Review D, 1986, 33, 3495-3508.	4.7	692