Felix Kahlhoefer

List of Publications by Year
in descending order

60 papers	3,852 citations	117625 34 h-index	118850 62 g-index
62 all docs	62 docs citations	62 times ranked	6771 citing authors

#	Article	IF	Citations
1	A facility to search for hidden particles at the CERN SPS: the SHiP physics case. Reports on Progress in Physics, 2016, 79, 124201.	20.1	496
2	Simplified models for dark matter searches at the LHC. Physics of the Dark Universe, 2015, 9-10, 8-23.	4.9	250
3	Review of LHC dark matter searches. International Journal of Modern Physics A, 2017, 32, 1730006.	1.5	181
4	Colliding clusters and dark matter self-interactions. Monthly Notices of the Royal Astronomical Society, 2014, 437, 2865-2881.	4.4	159
5	Revised constraints and Belle II sensitivity for visible and invisible axion-like particles. Journal of High Energy Physics, 2017, 2017, 1.	4.7	155
6	Implications of unitarity and gauge invariance for simplified dark matter models. Journal of High Energy Physics, 2016, 2016, 1.	4.7	148
7	ALPtraum: ALP production in proton beam dump experiments. Journal of High Energy Physics, 2016, 2016, 1.	4.7	133
8	Strong Constraints on Self-Interacting Dark Matter with Light Mediators. Physical Review Letters, 2017, 118, 141802.	7.8	112
9	Directly Detecting Sub-GeV Dark Matter with Electrons from Nuclear Scattering. Physical Review Letters, 2018, 121, 101801.	7.8	103
10	LHC and Tevatron bounds on the dark matter direct detection cross-section for vector mediators. Journal of High Energy Physics, 2012, 2012, 1.	4.7	101
11	Constraining dark sectors with monojets and dijets. Journal of High Energy Physics, 2015, 2015, 1.	4.7	99
12	Direct detection of dark matter in models with a light Zâ€². Journal of High Energy Physics, 2011, 2011, 1.	4.7	92
13	The unbearable lightness of being: CDMS versus XENON. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 023-023.	5.4	91
14	Global analyses of Higgs portal singlet dark matter models using GAMBIT. European Physical Journal C, 2019, 79, 38.	3.9	85
15	Simplified dark matter models with two Higgs doublets: I. Pseudoscalar mediators. Journal of High Energy Physics, 2017, 2017, 1.	4.7	81
16	DarkBit: a GAMBIT module for computing dark matter observables and likelihoods. European Physical Journal C, 2017, 77, 1.	3.9	80
17	The impact of heavy-quark loops on LHC dark-matter searches. Journal of High Energy Physics, 2013, 2013, 1.	4.7	76
18	How to save the WIMP: global analysis of a dark matter model with two s-channel mediators. Journal of High Energy Physics, 2016, 2016, 1.	4.7	76

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19	Dark matter self-interactions from a general spin-0 mediator. Journal of Cosmology and Astroparticle Physics, 2017, 2017, 003-003.	5.4	70
20	Loop-induced dark matter direct detection signals from γ-ray lines. Journal of Cosmology and Astroparticle Physics, 2012, 2012, 033-033.	5.4	63
21	Impact of vacuum stability, perturbativity and XENON1T on global fits of $\mathbb{Z}_2$ and $\mathbb{Z}_3$ scalar singlet dark matter. European Physical Journal C, 2018, 78, 830.	3.9	62
22	Dirac materials for sub-MeV dark matter detection: New targets and improved formalism. Physical Review D, 2020, 101, .	4.7	58
23	QCD effects in mono-jet searches for dark matter. Journal of High Energy Physics, 2013, 2013, 1.	4.7	56
24	Interplay between scintillation and ionization in liquid xenon Dark Matter searches. Astroparticle Physics, 2011, 35, 119-127.	4.3	49
25	Freeze-in production of decaying dark matter in five steps. Journal of Cosmology and Astroparticle Physics, 2018, 2018, 048-048.	5.4	46
26	On the importance of loop-induced spin-independent interactions for dark matter direct detection. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 050-050.	5.4	44
27	Invisible and displaced dark matter signatures at Belle II. Journal of High Energy Physics, 2020, 2020, 1.	4.7	44
28	Model-independent bounds on light pseudoscalars from rare B-meson decays. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 790, 537-544.	4.1	43
29	Constraints on Z$'$ models from LHC dijet searches and implications for dark matter. Journal of High Energy Physics, 2016, 2016, 1.	4.7	41
30	Recommendations on presenting LHC searches for missing transverse energy signals using simplified s-channel models of dark matter. Physics of the Dark Universe, 2020, 27, 100365.	4.9	41
31	Hidden photon dark matter in the light of XENON1T and stellar cooling. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 029-029.	5.4	37
32	On the interplay between astrophysical and laboratory probes of MeV-scale axion-like particles. Journal of High Energy Physics, 2020, 2020, 1.	4.7	36
33	Recommendations of the LHC Dark Matter Working Group: Comparing LHC searches for dark matter mediators in visible and invisible decay channels and calculations of the thermal relic density. Physics of the Dark Universe, 2019, 26, 100377.	4.9	36
34	Casting a graph net to catch dark showers. SciPost Physics, 2021, 10, .	4.9	34
35	Studying generalised dark matter interactions with extended halo-independent methods. Journal of Cosmology and Astroparticle Physics, 2016, 2016, 032-032.	5.4	30
36	Materials Informatics for Dark Matter Detection. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800293.	2.4	30

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37	Strongly interacting dark sectors in the early Universe and at the LHC through a simplified portal. Journal of High Energy Physics, 2020, 2020, 1.	4.7	29
38	Reinterpretation of LHC Results for New Physics: Status and recommendations after Run 2. SciPost Physics, 2020, 9, .	4.9	28
39	Exploring light mediators with low-threshold direct detection experiments. Journal of Cosmology and Astroparticle Physics, 2017, 2017, 016-016.	5.4	27
40	Semiclassical regime for dark matter self-interactions. Physical Review D, 2021, 103, .	4.7	27
41	On mono-W signatures in spin-1 simplified models. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 760, 207-213.	4.1	25
42	Global fits of axion-like particles to XENON1T and astrophysical data. Journal of High Energy Physics, 2021, 2021, 1.	4.7	25
43	Axion global fits with Peccei-Quinn symmetry breaking before inflation using GAMBIT. Journal of High Energy Physics, 2019, 2019, 1.	4.7	24
44	Loop-induced direct detection signatures from CP-violating scalar mediators. Journal of High Energy Physics, 2019, 2019, 1.	4.7	23
45	Strengthening the bound on the mass of the lightest neutrino with terrestrial and cosmological experiments. Physical Review D, 2021, 103, .	4.7	21
46	Probing the freeze-in mechanism in dark matter models with $U(1)'$ gauge extensions. Physical Review D, 2020, 101, .	4.7	19
47	Resonant sub-GeV Dirac dark matter. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 040.	5.4	17
48	Thermal WIMPs and the scale of new physics: global fits of Dirac dark matter effective field theories. European Physical Journal C, 2021, 81, 1.	3.9	17
49	Hunting the dark Higgs. Journal of High Energy Physics, 2017, 2017, 1.	4.7	16
50	CosmoBit: a GAMBIT module for computing cosmological observables and likelihoods. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 022-022.	5.4	15
51	Freezing-in a hot bath: resonances, medium effects and phase transitions. Journal of High Energy Physics, 2022, 2022, 1.	4.7	14
52	N-body simulations of dark matter with frequent self-interactions. Monthly Notices of the Royal Astronomical Society, 2021, 505, 851-868.	4.4	13
53	On the LHC sensitivity for non-thermalised hidden sectors. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 779, 388-392.	4.1	12
54	Electron recoils from terrestrial upscattering of inelastic dark matter. Physical Review D, 2022, 105, .	4.7	12

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55	ALPINIST: Axion-Like Particles In Numerous Interactions Simulated and Tabulated. Journal of High Energy Physics, 2022, 2022, .	4.7	11
56	Leading logs in QCD axion effective field theory. Journal of High Energy Physics, 2021, 2021, 1.	4.7	9
57	Simple and statistically sound recommendations for analysing physical theories. Reports on Progress in Physics, 2022, 85, 052201.	20.1	9
58	Interference effects in dilepton resonance searches for Zâ€² bosons and dark matter mediators. Journal of High Energy Physics, 2020, 2020, 1.	4.7	7
59	On dark atoms, massive dark photons and millicharged sub-components. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 807, 135601.	4.1	6
60	On the challenges of searching for GeV-scale long-lived particles at the LHC. Journal of High Energy Physics, 2021, 2021, 1.	4.7	6