

# Pat Scott

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3904520/publications.pdf>

Version: 2024-02-01

91  
papers

10,875  
citations

94269

37  
h-index

43802

91  
g-index

101  
all docs

101  
docs citations

101  
times ranked

13156  
citing authors

#	ARTICLE	IF	CITATIONS
1	The Chemical Composition of the Sun. Annual Review of Astronomy and Astrophysics, 2009, 47, 481-522.	8.1	6,648
2	Update on scalar singlet dark matter. Physical Review D, 2013, 88, .	1.6	408
3	The chemical composition of the Sun. Astrophysics and Space Science, 2010, 328, 179-183.	0.5	247
4	The elemental composition of the Sun. Astronomy and Astrophysics, 2015, 573, A26.	2.1	221
5	The elemental composition of the Sun. Astronomy and Astrophysics, 2015, 573, A25.	2.1	181
6	Improved constraints on the primordial power spectrum at small scales from ultracompact minihalos. Physical Review D, 2012, 85, .	1.6	173
7	The elemental composition of the Sun. Astronomy and Astrophysics, 2015, 573, A27.	2.1	167
8	Status of the scalar singlet dark matter model. European Physical Journal C, 2017, 77, 568.	1.4	145
9	A realistic assessment of the CTA sensitivity to dark matter annihilation. Journal of Cosmology and Astroparticle Physics, 2015, 2015, 055-055.	1.9	100
10	Direct constraints on minimal supersymmetry from Fermi-LAT observations of the dwarf galaxy Segue 1. Journal of Cosmology and Astroparticle Physics, 2010, 2010, 031-031.	1.9	86
11	Global analyses of Higgs portal singlet dark matter models using GAMBIT. European Physical Journal C, 2019, 79, 38.	1.4	85
12	DarkBit: a GAMBIT module for computing dark matter observables and likelihoods. European Physical Journal C, 2017, 77, 1.	1.4	80
13	Gamma Rays from Ultracompact Primordial Dark Matter Minihalos. Physical Review Letters, 2009, 103, 211301.	2.9	77
14	Dark stars at the Galactic Centre - the main sequence. Monthly Notices of the Royal Astronomical Society, 2009, 394, 82-104.	1.6	73
15	Global fits of GUT-scale SUSY models with GAMBIT. European Physical Journal C, 2017, 77, 1.	1.4	70
16	Line formation in solar granulation. Astronomy and Astrophysics, 2006, 456, 675-688.	2.1	67
17	A profile likelihood analysis of the constrained MSSM with genetic algorithms. Journal of High Energy Physics, 2010, 2010, 1.	1.6	66
18	Implications of new physics in the decays $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{B} \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle \text{c} \langle \text{mml:mi} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mo stretchy="false"} \rangle \hat{\tau} \langle \text{mml:mo} \rangle \langle \text{mml:mo mathvariant="bold"} \rangle$		

#	ARTICLE	IF	CITATIONS
19	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.	1.4	62
20	A global fit of the MSSM with GAMBIT. European Physical Journal C, 2017, 77, 1.	1.4	61
21	Dark matter CMB constraints and likelihoods for poor particle physicists. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 044-044.	1.9	60
22	Combined analysis of effective Higgs portal dark matter models. Physical Review D, 2016, 93, .	1.6	57
23	Improved limits on dark matter annihilation in the Sun with the 79-string IceCube detector and implications for supersymmetry. Journal of Cosmology and Astroparticle Physics, 2016, 2016, 022-022.	1.9	56
24	ON THE SOLAR NICKEL AND OXYGEN ABUNDANCES. Astrophysical Journal, 2009, 691, L119-L122.	1.6	52
25	Investigating dark matter substructure with pulsar timing â€” I. Constraints on ultracompact minihaloes. Monthly Notices of the Royal Astronomical Society, 2016, 456, 1394-1401.	1.6	51
26	Combined collider constraints on neutralinos and charginos. European Physical Journal C, 2019, 79, 1.	1.4	50
27	Comparison of statistical sampling methods with ScannerBit, the GAMBIT scanning module. European Physical Journal C, 2017, 77, 1.	1.4	49
28	Detection of isolated Population III stars with the James Webb Space Telescope. Monthly Notices of the Royal Astronomical Society, 2013, 429, 3658-3664.	1.6	48
29	Possible Indication of Momentum-Dependent Asymmetric Dark Matter in the Sun. Physical Review Letters, 2015, 114, 081302.	2.9	48
30	The zero age main sequence of WIMP burners. Physical Review D, 2008, 77, .	1.6	44
31	Sensitivity of CTA to dark matter signals from the Galactic Center. Journal of Cosmology and Astroparticle Physics, 2014, 2014, 024-024.	1.9	44
32	FINDING HIGH-REDSHIFT DARK STARS WITH THE JAMES WEBB SPACE TELESCOPE. Astrophysical Journal, 2010, 717, 257-267.	1.6	41
33	Pippi â€” Painless parsing, post-processing and plotting of posterior and likelihood samples. European Physical Journal Plus, 2012, 127, 1.	1.2	41
34	GAMBIT: the global and modular beyond-the-standard-model inference tool. European Physical Journal C, 2017, 77, 1.	1.4	41
35	ColliderBit: a GAMBIT module for the calculation of high-energy collider observables and likelihoods. European Physical Journal C, 2017, 77, 1.	1.4	39
36	Fundamental statistical limitations of future dark matter direct detection experiments. Physical Review D, 2012, 86, .	1.6	38

#	ARTICLE	IF	CITATIONS
37	How well will ton-scale dark matter direct detection experiments constrain minimal supersymmetry?. Journal of Cosmology and Astroparticle Physics, 2011, 2011, 012-012.	1.9	37
38	Number counts and non-Gaussianity. Physical Review D, 2013, 88, .	1.6	34
39	Towards the next generation of simplified Dark Matter models. Physics of the Dark Universe, 2017, 16, 49-70.	1.8	34
40	Evaporation and scattering of momentum- and velocity-dependent dark matter in the Sun. Journal of Cosmology and Astroparticle Physics, 2017, 2017, 037-037.	1.9	34
41	Ultracompact Minihalos as Probes of Inflationary Cosmology. Physical Review Letters, 2016, 117, 141102.	2.9	31
42	Reinterpretation of LHC Results for New Physics: Status and recommendations after Run 2. SciPost Physics, 2020, 9, .	1.5	28
43	Generalised form factor dark matter in the Sun. Journal of Cosmology and Astroparticle Physics, 2015, 2015, 040-040.	1.9	27
44	FlavBit: a GAMBIT module for computing flavour observables and likelihoods. European Physical Journal C, 2017, 77, 1.	1.4	27
45	Sensitivity of IceCube-DeepCore to neutralino dark matter in the MSSM-25. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 027-027.	1.9	25
46	Thermal conduction by dark matter with velocity and momentum-dependent cross-sections. Journal of Cosmology and Astroparticle Physics, 2014, 2014, 019-019.	1.9	25
47	Global fits of axion-like particles to XENON1T and astrophysical data. Journal of High Energy Physics, 2021, 2021, 1.	1.6	25
48	Axion global fits with Peccei-Quinn symmetry breaking before inflation using GAMBIT. Journal of High Energy Physics, 2019, 2019, 1.	1.6	24
49	Statistical coverage for supersymmetric parameter estimation: a case study with direct detection of dark matter. Journal of Cosmology and Astroparticle Physics, 2011, 2011, 002-002.	1.9	23
50	Implications of solar wind measurements for solar models and composition. Monthly Notices of the Royal Astronomical Society, 2016, 463, 2-9.	1.6	22
51	Observational constraints on supermassive dark stars. Monthly Notices of the Royal Astronomical Society: Letters, 2010, 407, L74-L78.	1.2	21
52	Quantifying impacts of short-term plasticity on neuronal information transfer. Physical Review E, 2012, 85, 041921.	0.8	21
53	Investigating dark matter substructure with pulsar timing $\hat{\alpha}$ II. Improved limits on small-scale cosmology. Monthly Notices of the Royal Astronomical Society, 2016, 456, 1402-1409.	1.6	21
54	SpecBit, DecayBit and PrecisionBit: GAMBIT modules for computing mass spectra, particle decay rates and precision observables. European Physical Journal C, 2018, 78, 1.	1.4	21

#	ARTICLE	IF	CITATIONS
55	Strengthening the bound on the mass of the lightest neutrino with terrestrial and cosmological experiments. <i>Physical Review D</i> , 2021, 103, .	1.6	21
56	Hunting for dark halo substructure using submilliarcsecond-scale observations of macrolensed radio jets. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 431, 2172-2183.	1.6	19
57	GAMBIT: the global and modular beyond-the-standard-model inference tool. <i>European Physical Journal C</i> , 2018, 78, 1.	1.4	18
58	IMPACTS OF DARK STARS ON REIONIZATION AND SIGNATURES IN THE COSMIC MICROWAVE BACKGROUND. <i>Astrophysical Journal</i> , 2011, 742, 129.	1.6	17
59	Faint objects in motion: the new frontier of high precision astrometry. <i>Experimental Astronomy</i> , 2021, 51, 845-886.	1.6	17
60	Thermal WIMPs and the scale of new physics: global fits of Dirac dark matter effective field theories. <i>European Physical Journal C</i> , 2021, 81, 1.	1.4	17
61	Two-loop mass splittings in electroweak multiplets: Winos and minimal dark matter. <i>Physical Review D</i> , 2018, 97, .	1.6	16
62	Use of event-level neutrino telescope data in global fits for theories of new physics. <i>Journal of Cosmology and Astroparticle Physics</i> , 2012, 2012, 057-057.	1.9	15
63	Updated constraints on velocity and momentum-dependent asymmetric dark matter. <i>Journal of Cosmology and Astroparticle Physics</i> , 2016, 2016, 007-007.	1.9	15
64	Effect of electromagnetic dipole dark matter on energy transport in the solar interior. <i>Journal of Cosmology and Astroparticle Physics</i> , 2017, 2017, 029-029.	1.9	15
65	CosmoBit: a GAMBIT module for computing cosmological observables and likelihoods. <i>Journal of Cosmology and Astroparticle Physics</i> , 2021, 2021, 022-022.	1.9	15
66	GAMBIT and its application in the search for physics Beyond the Standard Model. <i>Progress in Particle and Nuclear Physics</i> , 2020, 113, 103769.	5.6	14
67	Constraints on cosmic strings from ultracompact minihalos. <i>Physical Review D</i> , 2015, 92, .	1.6	13
68	The chemical composition of the sun <sup>1</sup> This review is part of a Special Issue on the 10th International Colloquium on Atomic Spectra and Oscillator Strengths for Astrophysical and Laboratory Plasmas.. <i>Canadian Journal of Physics</i> , 2011, 89, 327-331.	0.4	12
69	Implications for constrained supersymmetry of combined H.E.S.S. observations of dwarf galaxies, the Galactic halo and the Galactic Centre. <i>Journal of Cosmology and Astroparticle Physics</i> , 2011, 2011, 004-004.	1.9	12
70	Light bosons in the photosphere and the solar abundance problem. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 432, 3332-3339.	1.6	12
71	LOW MASS STELLAR EVOLUTION WITH WIMP CAPTURE AND ANNIHILATION. , 2008, , .		11
72	Dark matter substructure cannot explain properties of the Fermi Galactic Centre excess. <i>Journal of Cosmology and Astroparticle Physics</i> , 2018, 2018, 060-060.	1.9	10

#	ARTICLE	IF	CITATIONS
73	Heating of galactic gas by dark matter annihilation in ultracompact minihalos. <i>Journal of Cosmology and Astroparticle Physics</i> , 2017, 2017, 048-048.	1.9	9
74	The GAMBIT Universal Model Machine: from Lagrangians to likelihoods. <i>European Physical Journal C</i> , 2021, 81, 1.	1.4	9
75	Simple and statistically sound recommendations for analysing physical theories. <i>Reports on Progress in Physics</i> , 2022, 85, 052201.	8.1	9
76	A comparison of optimisation algorithms for high-dimensional particle and astrophysics applications. <i>Journal of High Energy Physics</i> , 2021, 2021, 1.	1.6	7
77	Pitfalls of iterative pole mass calculation in electroweak multiplets. <i>European Physical Journal Plus</i> , 2018, 133, 1.	1.2	6
78	A model-independent analysis of $\Upsilon(4S) \rightarrow \mu^+ \mu^- \Upsilon(4S)$ transitions with GAMBIT and FlavBit. <i>European Physical Journal C</i> , 2021, 81, 1.	1.4	6
79	Simulation of energy transport by dark matter scattering in stars. <i>Journal of Cosmology and Astroparticle Physics</i> , 2022, 2022, 002.	1.9	6
80	Constraints on small-scale cosmological perturbations from gamma-ray searches for dark matter. <i>Journal of Physics: Conference Series</i> , 2012, 375, 032012.	0.3	5
81	Why GN93 should not be used anymore. <i>EPJ Web of Conferences</i> , 2013, 43, 01004.	0.1	5
82	Xsec: the cross-section evaluation code. <i>European Physical Journal C</i> , 2020, 80, 1.	1.4	5
83	The New Solar Composition and the Solar Metallicity. , 2011, , 51-60.		3
84	THE DARKSTARS CODE: A PUBLICLY AVAILABLE DARK STELLAR EVOLUTION PACKAGE. , 2009, , .		3
85	Dark energy without fine tuning. <i>Journal of High Energy Physics</i> , 2019, 2019, 1.	1.6	1
86	Status of the scalar singlet dark matter model. , 0, .		1
87	Can the James Webb Space Telescope detect isolated population III stars?. , 2011, , .		1
88	When supercomputers go over to the dark side. <i>Physics World</i> , 2017, 30, 42-46.	0.0	0
89	Impacts of WIMP dark matter upon stellar evolution: main-sequence stars. , 2009, , .		0
90	Dark stars: structure, evolution and impacts upon the high-redshift Universe. , 2011, , .		0

#	ARTICLE	IF	CITATIONS
91	Dark matter theory: implications and future prospects for Fermi. , 2017, , .		0