Searches for Sterile Neutrinos with the IceCube Detecto

Physical Review Letters

117, 071801

DOI: 10.1103/physrevlett.117.071801

Citation Report

#	Article	IF	Citations
1	Icy telescope throws cold water on sterile neutrino theory. Nature, 2016, , .	27.8	0
2	Sterile neutrinos give IceCube and other experiments the cold shoulder. Physics Today, 2016, 69, 15-18.	0.3	4
3	Suppression of cosmological sterile neutrino production by altered dispersion relations. Physical Review D, 2016, 94, .	4.7	5
4	First Constraints on the Complete Neutrino Mixing Matrix with a Sterile Neutrino. Physical Review Letters, 2016, 117, 221801.	7.8	53
5	Hunting the Sterile Neutrino. Physics Magazine, 2016, 9, .	0.1	0
6	Impact of Nonstandard Interactions on Sterile-Neutrino Searches at IceCube. Physical Review Letters, 2016, 117, 071802.	7.8	42
7	Limits on Active to Sterile Neutrino Oscillations from Disappearance Searches in the MINOS, Daya Bay, and Bugey-3 Experiments. Physical Review Letters, 2016, 117, 151801.	7.8	71
8	Search for Sterile Neutrinos Mixing with Muon Neutrinos in MINOS. Physical Review Letters, 2016, 117, 151803.	7.8	60
10	Pseudoscalarâ€”sterile neutrino interactions: reconciling the cosmos with neutrino oscillations. Journal of Cosmology and Astroparticle Physics, 2016, 2016, 067-067.	5.4	84
11	Nullius in verba. Nature Physics, 2016, 12, 817-817.	16.7	1
12	Reactor antineutrinos and nuclear physics. European Physical Journal A, 2016, 52, 1.	2.5	4
13	Analysis of four-zero textures in the 3+1 neutrino framework. Physical Review D, 2016, 94, .	4.7	10
14	A combined view of sterile-neutrino constraints from CMB and neutrino oscillation measurements. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 764, 322-327.	4.1	17
15	Joint short- and long-baseline constraints on light sterile neutrinos. Physical Review D, 2017, 95, .	4.7	21
16	A consistent theory of decaying Dark Matter connecting IceCube to the Sesame Street. Journal of Cosmology and Astroparticle Physics, 2017, 2017, 017-017.	5.4	30
17	Short-baseline electron antineutrino disappearance study by using neutrino sources from¹³C +⁹Be reaction. Journal of Cosmology and Astroparticle Physics, 2017, 2017, 044-044.	5.4	1
18	On the IceCube result on Î½Ì„Î¼ â†’Î½Ì„s oscillations. International Journal of Modern Physics A, 2017, 32, 1750018.	1.5	11
19	Fuzzy Dark Matter from Infrared Confining Dynamics. Physical Review Letters, 2017, 118, 141801.	7.8	25

#	Article	IF	Citations
20	Sterile Neutrino Search at the NEOS Experiment. Physical Review Letters, 2017, 118, 121802.	7.8	240
21	Texture zeros of low-energy Majorana neutrino mass matrix in 3+1 scheme. Physical Review D, 2017, 96, .	4.7	10
22	Phenomenological study of extended seesaw model for light sterile neutrino. Journal of High Energy Physics, 2017, 2017, 1.	4.7	21
23	3FHL: The Third Catalog of Hard Fermi-LAT Sources. Astrophysical Journal, Supplement Series, 2017, 232, 18.	7.7	227
24	Updated global 3+1 analysis of short-baseline neutrino oscillations. Journal of High Energy Physics, 2017, 2017, 1.	4.7	171
25	First observation of low energy electron neutrinos in a liquid argon time projection chamber. Physical Review D, 2017, 95, .	4.7	33
26	Discriminating sterile neutrinos and unitarity violation with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>C</mml:mi><mml:mi>P</mml:mi></mml:math> invariants. Physical Review D, 2017, 95, .	4.7	7
27	Octant of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Î¸</mml:mi><mml:mn>23</mml:mn></mml:msub></mml:math> in Danger with a Light Sterile Neutrino. Physical Review Letters, 2017, 118, 031804.	7.8	34
28	Search for sterile neutrino mixing using three years of IceCube DeepCore data. Physical Review D, 2017, 95, .	4.7	75
29	Neutrinos propagating in curved spacetimes. European Physical Journal Plus, 2017, 132, 1.	2.6	2
30	Imprints of a light sterile neutrino at DUNE, T2HK, and T2HKK. Physical Review D, 2017, 96, .	4.7	30
31	Neutrinos in large extra dimensions and short-baseline <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Î½</mml:mi><mml:mi>e</mml:mi></mml:msub></mml:math> appearance. Physical Review D, 2017, 96, .	4.7	28
32	Search for active-sterile neutrino mixing using neutral-current interactions in NOvA. Physical Review D, 2017, 96, .	4.7	42
33	Testing decay of astrophysical neutrinos with incomplete information. Physical Review D, 2017, 95, .	4.7	68
34	Search for sterile neutrinos in muon neutrino disappearance mode at FNAL. European Physical Journal C, 2017, 77, 1.	3.9	1
35	Probing nonstandard neutrino cosmology with terrestrial neutrino experiments. Physical Review D, 2017, 95, .	4.7	7
36	Sterile Neutrino Searches: Experiment and Theory. Nuclear and Particle Physics Proceedings, 2017, 287-288, 133-138.	0.5	0
37	Search for the sterile neutrino mixing with the ICAL detector at INO. European Physical Journal C, 2017, 77, 1.	3.9	10

#	Article	IF	Citations
38	Discussion on Lorentz invariance violation of noncommutative field theory and neutrino oscillation. International Journal of Modern Physics A, 2017, 32, 1750040.	1.5	1
39	Non-standard interactions with high-energy atmospheric neutrinos at IceCube. Journal of High Energy Physics, 2017, 2017, 1.	4.7	36
40	Cosmology and time dependent parameters induced by a misaligned light scalar. Physical Review D, 2017, 95, .	4.7	19
41	Searches for new physics at the Hyper-Kamiokande experiment. Physical Review D, 2017, 95, .	4.7	22
42	ICARUS: perspective for sterile neutrino search at FermiLab. Nuclear and Particle Physics Proceedings, 2017, 291-293, 189-194.	0.5	0
43	Prospects of light sterile neutrino oscillation and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>C</mml:mi><mml:mi>P</mml:mi></mml:mrow></mml:math> violation searches at the Fermilab Short Baseline Neutrino Facility. Physical Review D, 2017, 96, .	4.7	10
44	Seeking sterile neutrinos in Finslerian cosmology. European Physical Journal C, 2017, 77, 1.	3.9	4
45	Solar neutrino detectors as sterile neutrino hunters. Journal of Physics: Conference Series, 2017, 888, 012018.	0.4	1
46	Light sterile neutrinos and neutrinoless double-beta decay. AIP Conference Proceedings, 2017, , .	0.4	1
47	Bose-Einstein Condensate Dark Matter Halos Confronted with Galactic Rotation Curves. Advances in High Energy Physics, 2017, 2017, 1-14.	1.1	6
48	Multiple angles on the sterile neutrino â€“ a combined view of cosmological and oscillation limits. Journal of Physics: Conference Series, 2017, 888, 012198.	0.4	0
49	Oscillations Beyond Three-Neutrino Mixing. Journal of Physics: Conference Series, 2017, 888, 012231.	0.4	2
50	Results from the search for eV-sterile neutrinos with IceCube. Journal of Physics: Conference Series, 2017, 888, 012257.	0.4	0
51	Statistical sensitivity on right-handed currents in presence of eV scale sterile neutrinos with KATRIN. Journal of Cosmology and Astroparticle Physics, 2017, 2017, 015-015.	5.4	7
52	Oscillations Beyond Three-Neutrino Mixing. Journal of Physics: Conference Series, 2017, 888, 012019.	0.4	1
53	Atmospheric neutrino results from IceCube-DeepCore and plans for PINGU. Journal of Physics: Conference Series, 2017, 888, 012023.	0.4	1
54	Effects of sterile neutrinos and an extra dimension on big bang nucleosynthesis. Physical Review D, 2018, 97, .	4.7	7
55	Measuring growth index in a universe with massive neutrinos: A revisit of the general relativity test with the latest observations. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 779, 473-478.	4.1	29

#	Article	IF	Citations
56	Neutrino oscillations: The rise of the PMNS paradigm. Progress in Particle and Nuclear Physics, 2018, 98, 1-54.	14.4	47
57	The new front end and DAQ of the ICARUS detector. EPJ Web of Conferences, 2018, 182, 03003.	0.3	4
58	A strong test of the dark matter origin of a TeV electron excess using icecube neutrinos. Journal of Cosmology and Astroparticle Physics, 2018, 2018, 030-030.	5.4	6
59	The ICARUS experiment. EPJ Web of Conferences, 2018, 182, 02042.	0.3	2
60	The Plot Thickens for a Fourth Neutrino. Physics Magazine, 2018, 11, .	0.1	0
61	Oscillations Beyond Three-Neutrino Mixing. Journal of Physics: Conference Series, 2018, 1056, 012024.	0.4	0
62	Probing a four flavor vis-a-vis three flavor neutrino mixing for ultrahigh energy neutrino signals at a 1â€‰â€‰km2 detector. Physical Review D, 2018, 97, .	4.7	3
63	Non-unitary lepton mixing in an inverse seesaw and its impact on the physics potential of long-baseline experiments. Journal of Physics G: Nuclear and Particle Physics, 2018, 45, 095003.	3.6	7
64	New light Higgs boson and short-baseline neutrino anomalies. Physical Review D, 2018, 97, .	4.7	25
65	Exploring a nonminimal sterile neutrino model involving decay at IceCube. Physical Review D, 2018, 97, .	4.7	29
66	Neutrino interferometry for high-precision tests of Lorentz symmetry with IceCube. Nature Physics, 2018, 14, 961-966.	16.7	66
67	Searching for sterile neutrinos in dynamical dark energy cosmologies. Science China: Physics, Mechanics and Astronomy, 2018, 61, 1.	5.1	27
68	Neutrino oscillations in dark backgrounds. Journal of Cosmology and Astroparticle Physics, 2018, 2018, 004-004.	5.4	34
69	Constraining sterile neutrino cosmology with terrestrial oscillation experiments. Physical Review D, 2019, 100, .	4.7	17
70	An insight into additive manufacturing of fiber reinforced polymer composite. International Journal of Lightweight Materials and Manufacture, 2019, 2, 267-278.	2.1	65
71	Neutrino physics with the PTOLEMY project: active neutrino properties and the light sterile case. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 047-047.	5.4	85
72	Self-consistent calculation of the reactor antineutrino spectra including forbidden transitions. Journal of Physics G: Nuclear and Particle Physics, 2019, 46, 085103.	3.6	7
73	Efficient propagation of systematic uncertainties from calibration to analysis with the SnowStorm method in IceCube. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 048-048.	5.4	14

#	Article	IF	Citations
74	The Short-Baseline Neutrino Program at Fermilab. Annual Review of Nuclear and Particle Science, 2019, 69, 363-387.	10.2	98
75	NEOS Experiment. Journal of Physics: Conference Series, 2019, 1216, 012004.	0.4	3
76	IceCube Sterile Neutrino Searches. EPJ Web of Conferences, 2019, 207, 04005.	0.3	6
77	On the robustness of IceCubeâ€™s bound on sterile neutrinos in the presence of non-standard interactions. European Physical Journal C, 2019, 79, 1.	3.9	17
78	The Sterile Neutrino: A short introduction. EPJ Web of Conferences, 2019, 207, 04004.	0.3	9
79	Roles of sterile neutrinos in particle physics and cosmology. International Journal of Modern Physics A, 2019, 34, 1930005.	1.5	9
80	Search for light sterile neutrinos with the T2K far detector Super-Kamiokande at a baseline of 295Âkm. Physical Review D, 2019, 99, .	4.7	22
81	Search for Sterile Neutrinos in MINOS and MINOS+ Using a Two-Detector Fit. Physical Review Letters, 2019, 122, 091803.	7.8	91
82	Severe Constraints on New Physics Explanations of the MiniBooNE Excess. Physical Review Letters, 2019, 122, 081801.	7.8	22
83	Activating the fourth neutrino of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mn>3</mml:mn><mml:mo>+</mml:mo><mml:mn>1</mml:mn></mml:math> scheme. Physical Review D, 2019, 99, .	4.7	37
84	MiniBooNE, MINOS+ and IceCube data imply a baroque neutrino sector. Physical Review D, 2019, 99, .	4.7	21
85	Cosmological dependence of non-resonantly produced sterile neutrinos. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 047-047.	5.4	20
86	Hadronic interaction model sibyll<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>2.3</mml:mn><mml:mi mathvariant="normal">c</mml:mi></mml:mrow></mml:math>and inclusive lepton fluxes. Physical Review D, 2019, 100, .	4.7	70
87	Neutrino tomography of Earth. Nature Physics, 2019, 15, 37-40.	16.7	36
88	Physics with reactor neutrinos. Reports on Progress in Physics, 2019, 82, 036201.	20.1	19
89	Search for sterile neutrinos in a universe of vacuum energy interacting with cold dark matter. Physics of the Dark Universe, 2019, 23, 100261.	4.9	34
90	Status of light sterile neutrino searches. Progress in Particle and Nuclear Physics, 2020, 111, 103736.	14.4	123
91	Searching for eV-scale sterile neutrinos with eight years of atmospheric neutrinos at the IceCube Neutrino Telescope. Physical Review D, 2020, 102, .	4.7	34

#	Article	IF	Citations
92	Constraining sterile neutrino interpretations of the LSND and MiniBooNE anomalies with coherent neutrino scattering experiments. Physical Review D, 2020, 101, .	4.7	23
93	Where are we with light sterile neutrinos?. Physics Reports, 2020, 884, 1-59.	25.6	87
94	In-situ calibration of the single-photoelectron charge response of the IceCube photomultiplier tubes. Journal of Instrumentation, 2020, 15, P06032-P06032.	1.2	14
95	Light sterile neutrinos: the current picture from neutrino oscillations. Journal of Physics: Conference Series, 2020, 1468, 012120.	0.4	1
96	Combining sterile neutrino fits to short-baseline data with IceCube data. Physical Review D, 2020, 101, .	4.7	22
97	Compact perturbative expressions for oscillations with sterile neutrinos in matter. Physical Review D, 2020, 101, .	4.7	6
98	Analysis of the Results of the Neutrino-4 Experiment on the Search for the Sterile Neutrino and Comparison with Results of Other Experiments. JETP Letters, 2020, 112, 199-212.	1.4	18
99	Direct comparison of sterile neutrino constraints from cosmological data, $$u _{e}$$ disappearance data and $$u _{mu } ightarrow u _{e} $$ appearance data in a $$3+1$$ model. European Physical Journal C, 2020, 80, 1.	3.9	11
100	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Î¸</mml:mi></mml:mrow><mml:mrow><mml:mn>23</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> octant measurement in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>3</mml:mn><mml:mo>+</mml:mo><mml:mn>1</mml:mn></mml:mrow></mml:math> neutrino oscillations in T2HKK. Physical Review D, 2020, 101, .	4.7	5
101	The Viability of the 3Â+Â1 Neutrino Model in the Supernova Neutrino Process. Astrophysical Journal, 2020, 894, 99.	4.5	4
102	Neutrino puzzle: Anomalies, interactions, and cosmological tensions. Physical Review D, 2020, 101, .	4.7	202
103	Exploring Light Sterile Neutrinos at Long Baseline Experiments: A Review. Universe, 2020, 6, 41.	2.5	8
104	Alleviating the H₀ and Ïƒ₈ anomalies with a decaying dark matter model. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 026-026.	5.4	85
105	Sterile neutrinos in astrophysical neutrino flavor. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 015-015.	5.4	19
106	Constraints on the epoch of dark matter formation from MilkyÂWay satellites. Physical Review D, 2021, 103, .	4.7	16
107	IceCube-Gen2: the window to the extreme Universe. Journal of Physics G: Nuclear and Particle Physics, 2021, 48, 060501.	3.6	204
108	Search for sterile neutrinos with the Neutrino-4 experiment and measurement results. Physical Review D, 2021, 104, .	4.7	61
109	Sterile neutrinos. Physics Reports, 2021, 928, 1-63.	25.6	92

#	Article	IF	Citations
110	Simulations of Neutrino and Gamma-Ray Production from Relativistic Black-Hole Microquasar Jets. Galaxies, 2021, 9, 67.	3.0	6
111	Cosmological dependence of resonantly produced sterile neutrinos. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 008-008.	5.4	8
112	MeV-scale reheating temperature and cosmological production of light sterile neutrinos. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 015-015.	5.4	15
113	Sterile neutrino self-interactions: H₀ tension and short-baseline anomalies. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 029-029.	5.4	37
114	NonzeroÎ¸13with unbrokenÎ¼â^'Ï„symmetry of the active neutrino mass matrix in the presence of a light sterile neutrino. Physical Review D, 2017, 95, .	4.7	12
115	eV-Scale Sterile Neutrino Search Using Eight Years of Atmospheric Muon Neutrino Data from the IceCube Neutrino Observatory. Physical Review Letters, 2020, 125, 141801.	7.8	57
116	Neutrino oscillations in a quantum processor. Physical Review Research, 2019, 1, .	3.6	19
117	Sterile neutrinos with altered dispersion relations as an explanation for neutrino anomalies. European Physical Journal C, 2020, 80, 1.	3.9	6
118	Neutrino non-standard interactions: A status report. SciPost Physics Proceedings, 2019, , .	0.4	56
119	Sensitivity of the ANTARES neutrino telescope to atmospheric neutrino oscillation parameters. , 2017, , .		0
120	Re-evaluation of Fermiâ€™s theory of beta-decay. International Journal of Fundamental Physical Sciences, 2018, 8, 19-43.	0.2	0
121	Dark Matter and Dark Energy. Springer Theses, 2019, , 17-25.	0.1	0
122	Closing the neutrino BSM gap: Physics potential of atmospheric through-going muons at DUNE. Physical Review D, 2021, 104, .	4.7	4
123	Chirality and the Origin of Life. Symmetry, 2021, 13, 2277.	2.2	20
124	Search for Active-Sterile Antineutrino Mixing Using Neutral-Current Interactions with the NOvA Experiment. Physical Review Letters, 2021, 127, 201801.	7.8	10
125	Sterile Neutrinos with Neutrino Telescopes. Universe, 2021, 7, 426.	2.5	0
126	Cosmological search for sterile neutrinos after Planck 2018. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 827, 136940.	4.1	9
127	Modeling Particle Transport in Astrophysical Outflows and Simulations of Associated Emissions from Hadronic Microquasar Jets. Advances in High Energy Physics, 2022, 2022, 1-15.	1.1	3

#	Article	IF	Citations
128	Accelerating IceCubeâ€™s Photon Propagation Code with CUDA. Computing and Software for Big Science, 2022, 6, 1.	2.9	3
129	Bounds on light sterile neutrino mass and mixing from cosmology and laboratory searches. Physical Review D, 2021, 104, .	4.7	32
130	Relativistic Magnetized Astrophysical Plasma Outflows in Black-Hole Microquasars. Symmetry, 2022, 14, 485.	2.2	4
131	Two Sides of the Same Coin: Sterile Neutrinos and Dark Radiation, Status and Perspectives. Universe, 2022, 8, 175.	2.5	10
132	Cascade appearance signatures of sterile neutrinos at 1â€“100ÂTeV. Physical Review D, 2022, 105, .	4.7	2
133	Minimal dark energy: Key to sterile neutrino and Hubble constant tensions?. Physical Review D, 2022, 105, .	4.7	11
134	Can standard model and experimental uncertainties resolve the MiniBooNE anomaly?. Physical Review D, 2022, 105, .	4.7	13
135	Modeling and interpretation of geomagnetic data related to geothermal sources, Northwest of Delijan. Renewable Energy, 2022, 196, 444-450.	8.9	9
136	Impact of wave packet separation in low-energy sterile neutrino searches. Physical Review D, 2023, 107, .	4.7	7
137	Earth tomography with supernova neutrinos at future neutrino detectors. Physical Review D, 2023, 108, .	4.7	1
138	Light sterile neutrinos in the early universe: effects of altered dispersion relations and a coupling to axion-like dark matter. Journal of Cosmology and Astroparticle Physics, 2023, 2023, 056.	5.4	0
139	Integral Fluxes of Neutrinos and Gamma-Rays Emitted from Neighboring X-ray Binaries. Universe, 2023, 9, 517.	2.5	0
140	Atacama Cosmology Telescope: The persistence of neutrino self-interaction in cosmological measurements. Physical Review D, 2024, 109, .	4.7	1