

# Quentin Python

## List of Publications by Year in descending order

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Version: 2024-02-01

99  
papers

5,888  
citations

87888

38  
h-index

74163

75  
g-index

104  
all docs

104  
docs citations

104  
times ranked

6982  
citing authors

#	ARTICLE	IF	CITATIONS
1	Search for strongly interacting massive particles generating trackless jets in proton-proton collisions at $\sqrt{s} = 13, \text{ext TeV}$ . European Physical Journal C, 2022, 82, 213.	3.9	3
2	Search for low-mass dilepton resonances in Higgs boson decays to four-lepton final states in proton-proton collisions at $\sqrt{s} = 13, \text{ext TeV}$ . European Physical Journal C, 2022, 82, 290.	3.9	18
3	Measurements of production cross sections of polarized same-sign $W$ boson pairs in association with two jets in proton-proton collisions at $\sqrt{s} = 13, \text{ext TeV}$ . European Physical Journal C, 2021, 81, 13.	4.1	20
4	Search for dark matter produced in association with a leptonically decaying $Z$ boson in proton-proton collisions at $\sqrt{s} = 13, \text{ext TeV}$ . European Physical Journal C, 2021, 81, 13.	3.9	33
5	Search for top squark pair production using dilepton final states in collision data collected at $\sqrt{s} = 13, \text{ext TeV}$ . European Physical Journal C, 2021, 81, 3.	3.9	33
6	Studies of charm and beauty hadron long-range correlations in pp and pPb collisions at LHC energies. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 813, 136036.	4.1	13
7	Measurements of $p \bar{p} \rightarrow Z Z$ production cross sections and constraints on anomalous triple gauge couplings at $\sqrt{s} = 13, \text{ext TeV}$ . European Physical Journal C, 2021, 81, 200.	3.9	24
8	Development and validation of HERWIG <sup>7</sup> tunes from CMS underlying-event measurements. European Physical Journal C, 2021, 81, 312.	3.9	12
9	Measurement of the Higgs boson production rate in association with top quarks in final states with electrons, muons, and hadronically decaying tau leptons at $\sqrt{s} = 13, \text{ext TeV}$ . European Physical Journal C, 2021, 81, 378.	3.9	40
10	Electron and photon reconstruction and identification with the CMS experiment at the CERN LHC. Journal of Instrumentation, 2021, 16, P05014.	1.2	62
11	MUSIC: a model-unspecific search for new physics in proton-proton collisions at $\sqrt{s} = 13, \text{ext TeV}$ . European Physical Journal C, 2021, 81, 629.	3.9	18
12	Search for the rare decay of the $W$ boson into a pion and a photon in proton-proton collisions at $\sqrt{s} = 13, \text{ext TeV}$ . Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 819, 136409.	4.1	3
13	Search for a heavy vector resonance decaying to a $Z$ boson and a Higgs boson in proton-proton collisions at $\sqrt{s} = 13, \text{ext TeV}$ . European Physical Journal C, 2021, 81, 136409.	3.9	9
14	Measurements of the azimuthal anisotropy of mesons in PbPb collisions at $\sqrt{s_{NN}} = 2.76, 5.02, \text{ext TeV}$ . European Physical Journal C, 2021, 81, 136446.	4.1	13
15	Search for singly and pair-produced leptoquarks coupling to third-generation fermions in proton-proton collisions at $\sqrt{s} = 13, \text{ext TeV}$ . European Physical Journal C, 2021, 81, 852.	4.7	3
16	Search for singly and pair-produced leptoquarks coupling to third-generation fermions in proton-proton collisions at $\sqrt{s} = 13, \text{ext TeV}$ . European Physical Journal C, 2021, 81, 852.	4.1	33
17	Measurements of angular distance and momentum ratio distributions in three-jet and $Z$ + two-jet final states in $pp$ collisions. European Physical Journal C, 2021, 81, 852.	3.9	2
18	A Deep Neural Network for Simultaneous Estimation of b Jet Energy and Resolution. Computing and Software for Big Science, 2020, 4, 10.	2.9	21

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19	Performance of the reconstruction and identification of high-momentum muons in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of Instrumentation, 2020, 15, P02027-P02027.	1.2	27
20	Pileup mitigation at CMS in 13 TeV data. Journal of Instrumentation, 2020, 15, P09018-P09018.	1.2	47
21	Performance of the CMS Level-1 trigger in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of Instrumentation, 2020, 15, P10017-P10017.	1.2	84
22	Search for direct top squark pair production in events with one lepton, jets, and missing transverse momentum at 13 TeV with the CMS experiment. Journal of High Energy Physics, 2020, 2020, 1.	4.7	21
23	Measurement of top quark pair production in association with a Z boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	4.7	20
24	Mixed higher-order anisotropic flow and nonlinear response coefficients of charged particles in $\sqrt{s_{NN}} = 2.76$ and 5.02 TeV $\sqrt{s_{NN}}$ collisions at $\sqrt{s_{NN}} = 2.76$ and 5.02 TeV. European Physical Journal C, 2020, 80, 534.	3.9	14
25	Extraction and validation of a new set of CMS pythia8 tunes from underlying-event measurements. European Physical Journal C, 2020, 80, 4.	3.9	198
26	Search for a Narrow Resonance Lighter than 200 GeV Decaying to a Pair of Muons in Proton-Proton Collisions at $\sqrt{s} = 13$ TeV. Physical Review Letters, 2020, 124, 131802.	7.8	61
27	A measurement of the Higgs boson mass in the diphoton decay channel. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 805, 135425.	4.1	63
28	Search for dark matter particles produced in association with a Higgs boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2020, 2020, 1.	4.7	14
29	Measurement of single-diffractive dijet production in proton-proton collisions at $\sqrt{s} = 8$ TeV with the CMS and TOTEM experiments. European Physical Journal C, 2020, 80, 1164.	3.9	5
30	Search for associated production of a Higgs boson and a single top quark in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2019, 99, .	4.7	20
31	Combination of CMS searches for heavy resonances decaying to pairs of bosons or leptons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 798, 134952.	4.1	17
32	Performance of missing transverse momentum reconstruction in proton-proton collisions at $\sqrt{s} = 13$ TeV using the CMS detector. Journal of Instrumentation, 2019, 14, P07004-P07004.	1.2	83
33	Search for the pair production of light top squarks in the $e^+e^-$ final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	5
34	Measurements of the $pp \rightarrow WZ$ inclusive and differential production cross sections and constraints on charged anomalous triple gauge couplings at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	14
35	Search for dark matter produced in association with a Higgs boson decaying to a pair of bottom quarks in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2019, 79, 280.	3.9	29
36	Search for invisible decays of a Higgs boson produced through vector boson fusion in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 793, 520-551.	4.1	14

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37	Search for $\overline{\text{t}}\text{t}\text{H}$ production in the $\text{H} \rightarrow \text{b}\overline{\text{b}}$ decay channel with leptonic $\overline{\text{t}}\text{t}$ decays in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	28
38	Search for heavy resonances decaying into two Higgs bosons or into a Higgs boson and a W or Z boson in proton-proton collisions at 13 TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	12
39	Measurements of differential Z boson production cross sections in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	4.7	28
40	Observation of Correlated Azimuthal Anisotropy Fourier Harmonics in $\text{pp} \rightarrow \text{Z} + \text{p}$ and $\text{pp} \rightarrow \text{Z} + \text{Pb}$ collisions at the LHC. Physical Review Letters, 2018, 120, 092301.	7.8	39
41	Observation of the Higgs boson decay to a pair of $\tau$ , leptons with the CMS detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 779, 283-316.	4.1	125
42	Search for new physics in events with a leptonically decaying Z boson and a large transverse momentum imbalance in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2018, 78, 291.	3.9	27
43	Measurements of the $\text{pp} \rightarrow \text{Z} + \text{Z}$ production cross section and the $\text{Z} \rightarrow 4\ell$ branching fraction, and constraints on anomalous triple gauge couplings at. European Physical Journal C, 2018, 78, 165.	3.9	52
44	Search for electroweak production of charginos and neutralinos in multilepton final states in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	63
45	Search for $\overline{\text{t}}\text{t}\text{H}$ production in the all-jet final state in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	20
46	Search for heavy resonances decaying into a vector boson and a Higgs boson in final states with charged leptons, neutrinos and b quarks at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	11
47	Measurements of Higgs boson properties in the diphoton decay channel in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	57
48	Measurement of jet substructure observables in $\text{pp} \rightarrow \text{t}\overline{\text{t}}$ events from proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	24
49	Search for $Z\tau^3$ resonances using leptonic and hadronic final states in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	17
50	Search for black holes and sphalerons in high-multiplicity final states in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	14
51	Performance of reconstruction and identification of $\tau$ , leptons decaying to hadrons and $\tau \rightarrow \mu + \nu_\tau$ in pp collisions at $\sqrt{s}=13$ TeV. Journal of Instrumentation, 2018, 13, P10005-P10005.	1.2	69
52	Measurement of differential cross sections for $\text{Z} + \text{jet}$ production in association with jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2018, 78, 965.	3.9	39
53	Search for a heavy resonance decaying into a Z boson and a Z or W boson in $\text{pp} \rightarrow \text{Z} + \text{Z}$ final states at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	8
54	Measurement of charged particle spectra in minimum-bias events from proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2018, 78, 697.	3.9	17

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55	Search for high-mass resonances in final states with a lepton and missing transverse momentum at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	25
56	Measurement of the underlying event activity in inclusive Z boson production in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	13
57	Search for dark matter produced in association with a Higgs boson decaying to $\hat{t}\hat{t}^3$ or $\hat{l}, +\hat{l}, \hat{a}^{\sim}$ at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	12
58	Search for a heavy resonance decaying into a Z boson and a vector boson in the $\overline{u}\overline{u}\mathit{q}\overline{q}$ final state. Journal of High Energy Physics, 2018, 2018, 1.	4.7	10
59	Identification of heavy-flavour jets with the CMS detector in pp collisions at 13 TeV. Journal of Instrumentation, 2018, 13, P05011-P05011.	1.2	241
60	Evidence for associated production of a Higgs boson with a top quark pair in final states with electrons, muons, and hadronically decaying $\hat{l},$ leptons at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	38
61	Observation of Higgs Boson Decay to Bottom Quarks. Physical Review Letters, 2018, 121, 121801.	7.8	219
62	Search for dark matter in events with energetic, hadronically decaying top quarks and missing transverse momentum at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	20
63	Measurements of differential cross sections of top quark pair production as a function of kinematic event variables in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	13
64	Measurement of the inelastic proton-proton cross section at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	62
65	Search for high-mass resonances in dilepton final states in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	86
66	Measurement of differential cross sections for the production of top quark pairs and of additional jets in $\overline{e}e$ events from $pp$ collisions at $\sqrt{s}=13$ TeV. Physical Review D, 2018, 2018, 1.	4.7	30
67	Measurement of the $W$ boson and transverse momentum imbalance at $\sqrt{s}=13$ TeV. Physical Review D, 2018, 2018, 1.	4.7	78
68	Performance of the CMS muon detector and muon reconstruction with proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of Instrumentation, 2018, 13, P06015-P06015.	1.2	180
69	Search for top squarks and dark matter particles in opposite-charge dilepton final states at $\sqrt{s}=13$ TeV. Physical Review D, 2018, 2018, 1.	4.7	36
70	Observation of $t\bar{t}$ production. Physical Review Letters, 2018, 120, 231801.	7.8	209
71	Measurements of the $\overline{p}p \rightarrow Z$ production cross section and the $Z \rightarrow 4\ell$ branching fraction, and constraints on anomalous triple gauge couplings at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.		3
72	Measurement and QCD analysis of double-differential inclusive jet cross sections in pp collisions at $\sqrt{s}=8$ TeV and cross section ratios to 2.76 and 7 TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	54

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73	Jet energy scale and resolution in the CMS experiment in pp collisions at 8 TeV. Journal of Instrumentation, 2017, 12, P02014-P02014.	1.2	216
74	The CMS trigger system. Journal of Instrumentation, 2017, 12, P01020-P01020.	1.2	307
75	Measurement of the differential cross sections for the associated production of a $W$ boson and jets in proton-proton collisions at $\sqrt{s} = 13$ TeV. Physical Review D, 2017, 96.	4.7	19
76	Charged-particle nuclear modification factors in PbPb and pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	103
77	Searches for pair production of third-generation squarks in $\sqrt{s} = 13$ TeV pp collisions. European Physical Journal C, 2017, 77, 327.	3.9	32
78	Search for direct production of supersymmetric partners of the top quark in the all-jets final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	22
79	Search for top squark pair production in pp collisions at $\sqrt{s} = 13$ TeV using single lepton events. Journal of High Energy Physics, 2017, 2017, 1.	4.7	31
80	Search for light bosons in decays of the 125 GeV Higgs boson in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	29
81	Search for heavy resonances that decay into a vector boson and a Higgs boson in hadronic final states at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2017, 77, 636.	3.9	38
82	Measurements of properties of the Higgs boson decaying into the four-lepton final state in pp collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	101
83	Particle-flow reconstruction and global event description with the CMS detector. Journal of Instrumentation, 2017, 12, P10003-P10003.	1.2	348
84	Measurement of the double-differential inclusive jet cross section in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2016, 76, 451.	3.9	55
85	Measurement of the ZZ production cross section and Z $\rightarrow$ $\tau^+\tau^-$ , $\tau^+\tau^+$ , $\tau^-\tau^-$ , $\tau^+\tau^+$ , $\tau^-\tau^-$ branching fraction in pp collisions at $\sqrt{s} = 13$ TeV. Physics Letters. Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 763, 280-303.	4.1	22
86	Search for direct pair production of scalar top quarks in the single- and dilepton channels in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	7
87	Search for the associated production of a Higgs boson with a single top quark in proton-proton collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	13
88	Search for new physics in same-sign dilepton events in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2016, 76, 439.	3.9	64
89	Event generator tunes obtained from underlying event and multiparton scattering measurements. European Physical Journal C, 2016, 76, 155.	3.9	499
90	Search for a very light NMSSM Higgs boson produced in decays of the 125 GeV scalar boson and decaying into $\tilde{l}_i$ , leptons in pp collisions at $\sqrt{s} = 8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	19



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91	Evidence for transverse-momentum- and pseudorapidity-dependent event-plane fluctuations in PbPb and $p$ -Pb collisions. Physical Review C, 2015, 92, .	2.9	140
92	Search for the standard model Higgs boson produced through vector boson fusion and decaying to $b\bar{b}$ . Physical Review D, 2015, 92, .	4.7	43
93	Measurement of diffractive dissociation cross sections in $p$ -Pb collisions at the LHC. Physical Review D, 2015, 92, .	4.7	46
94	Measurements of the $Z Z$ production cross sections in the $2u$ channel in proton-proton collisions at $\sqrt{s} = 7$ and $8$ . European Physical Journal C, 2015, 75, 511.	3.9	32
95	Pseudorapidity distribution of charged hadrons in proton-proton collisions at $\sqrt{s} = 7$ and $8$ . Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 751, 143-163.	4.1	45
96	Observation of the diphoton decay of the Higgs boson and measurement of its properties. European Physical Journal C, 2014, 74, 3076.	3.9	342
97	Search for the associated production of the Higgs boson with a top-quark pair. Journal of High Energy Physics, 2014, 2014, 1.	4.7	51
98	Identification techniques for highly boosted W bosons that decay into hadrons. Journal of High Energy Physics, 2014, 2014, 1.	4.7	43
99	Search for the associated production of the Higgs boson with a top-quark pair. , 2014, 2014, 1.		6