

# Filip Moortgat

## List of Publications by Year in descending order

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Version: 2024-02-01

228  
papers

21,227  
citations

22099

59  
h-index

9839

141  
g-index

233  
all docs

233  
docs citations

233  
times ranked

14400  
citing authors

#	ARTICLE	IF	CITATIONS
1	Review of Particle Physics. Physical Review D, 2018, 98, .	1.6	5,390
2	Review of Particle Physics. Progress of Theoretical and Experimental Physics, 2020, 2020, .	1.8	3,177
3	Precise determination of the mass of the Higgs boson and tests of compatibility of its couplings with the standard model predictions using proton collisions at 7 and 8 $\sqrt{s}$ TeV. European Physical Journal C, 2015, 75, 212.	1.4	541
4	Event generator tunes obtained from underlying event and multiparton scattering measurements. European Physical Journal C, 2016, 76, 155.	1.4	499
5	Observation of long-range, near-side angular correlations in proton-proton collisions at the LHC. Journal of High Energy Physics, 2010, 2010, 1.	1.6	497
6	SUSY Les Houches Accord: Interfacing SUSY Spectrum Calculators, Decay Packages, and Event Generators. Journal of High Energy Physics, 2004, 2004, 036-036.	1.6	413
7	Study of high-p T charged particle suppression in PbPb compared to pp collisions at $\sqrt{s_{\text{NN}}}=2.76$ TeV. European Physical Journal C, 2012, 72, 1.	1.4	369
8	Observation of the diphoton decay of the Higgs boson and measurement of its properties. European Physical Journal C, 2014, 74, 3076.	1.4	342
9	Observation of a new boson with mass near 125 GeV in pp collisions at $\sqrt{s}=7$ and 8 TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	320
10	Transverse-momentum and pseudorapidity distributions of charged hadrons in pp collisions at $\sqrt{s} = 0.9$ and 2.36 TeV. Journal of High Energy Physics, 2010, 2010, 1.	1.6	230
11	Suppression of non-prompt $J/\psi$ , prompt $J/\psi$ , and $\Upsilon(1S)$ in PbPb collisions at $\sqrt{s_{\text{NN}}}=2.76$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	200
12	Extraction and validation of a new set of CMS pythia8 tunes from underlying-event measurements. European Physical Journal C, 2020, 80, 4.	1.4	198
13	Centrality dependence of dihadron correlations and azimuthal anisotropy harmonics in PbPb collisions at $\sqrt{s_{\text{NN}}}=2.76$ TeV. European Physical Journal C, 2012, 72, 1.	1.4	181
14			

#	ARTICLE	IF	CITATIONS
19	Search for supersymmetry in hadronic final states with missing transverse energy using the variables $\hat{L}_{\pm}$ T and b-quark multiplicity in pp collisions at $\sqrt{s} = 8 \text{ TeV}$ . European Physical Journal C, 2013, 73, 2568.	1.4	147
20	Strange particle production in pp collisions at $\sqrt{s} = 0.9$ and 7 TeV. Journal of High Energy Physics, 2011, 2011, 1.	1.6	139
21	Prompt and non-prompt $J/\psi$ production in pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2011, 71, 1.	1.4	135
22	A search for a doubly-charged Higgs boson in pp collisions at $\sqrt{s} = 7 \text{ TeV}$ . European Physical Journal C, 2012, 72, 1.	1.4	129
23	Measurement of differential top-quark-pair production cross sections in pp collisions at $\sqrt{s} = 7 \text{ TeV}$ . European Physical Journal C, 2013, 73, 1.	1.4	125
24	Precision luminosity measurement in proton-proton collisions at $\sqrt{s} = 13, 8 \text{ TeV}$ in 2015 and 2016 at CMS. European Physical Journal C, 2021, 81, 800.	1.4	123
25	Measurements of inclusive W and Z cross sections in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2011, 2011, 1.	1.6	122
26	CMS tracking performance results from early LHC operation. European Physical Journal C, 2010, 70, 1165-1192.	1.4	120
27	Searches for long-lived charged particles in pp collisions at $\sqrt{s} = 7$ and 8 TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	118
28	Search for a light charged Higgs boson in top quark decays in pp collisions at $\sqrt{s} = 7 \text{ TeV}$ . Journal of High Energy Physics, 2012, 2012, 1.	1.6	117
29	Charged particle multiplicities in pp interactions at $\sqrt{s} = 0.9, 2.36,$ and 7 TeV. Journal of High Energy Physics, 2011, 2011, 1.	1.6	106
30	Charged-particle nuclear modification factors in PbPb and pPb collisions at $\sqrt{s_{NN}} = 5.02 \text{ TeV}$ . Journal of High Energy Physics, 2017, 2017, 1.	1.6	103
31	Measurements of properties of the Higgs boson decaying into the four-lepton final state in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ . Journal of High Energy Physics, 2017, 2017, 1.	1.6	101
32	Dependence on pseudorapidity and on centrality of charged hadron production in PbPb collisions at $\sqrt{s_{NN}} = 2.76 \text{ TeV}$ . Journal of High Energy Physics, 2011, 2011, 1.	1.6	99
33	Measurement of the underlying event activity at the LHC with $\sqrt{s} = 7 \text{ TeV}$ and comparison with $\sqrt{s} = 0.9 \text{ TeV}$ . Journal of High Energy Physics, 2011, 2011, 1.	1.6	97
34	Search for supersymmetry in hadronic final states using $M_{T2}$ in pp collisions at $\sqrt{s} = 7 \text{ TeV}$ . Journal of High Energy Physics, 2012, 2012, 1.	1.6	95
35	Search for a Higgs boson in the mass range from 145 to 1000 GeV decaying to a pair of W or Z bosons. Journal of High Energy Physics, 2015, 2015, 1.	1.6	92
36	Search for high-mass resonances in dilepton final states in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ . Journal of High Energy Physics, 2018, 2018, 1.	1.6	86

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37	Measurement of jet fragmentation into charged particles in pp and PbPb collisions at $\sqrt{s_{\mathrm{NN}}} = 2.76$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	85
38	Study of the production of charged pions, kaons, and protons in pPb collisions at $\sqrt{s_{\mathrm{NN}}} = 5.02$ TeV. European Physical Journal C, 2014, 74, 2847.	1.4	85
39	Performance of the CMS Level-1 trigger in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of Instrumentation, 2020, 15, P10017-P10017.	0.5	84
40	Measurement of the single-top-quark t-channel cross section in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	83
41	$J/\psi$ and $\Upsilon(2S)$ production in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	81
42	Search for production of four top quarks in final states with same-sign or multiple leptons in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2020, 80, 75.	1.4	78
43	Study of exclusive two-photon production of $W+W\gamma$ in pp collisions at $\sqrt{s} = 7$ TeV and constraints on anomalous quartic gauge couplings. Journal of High Energy Physics, 2013, 2013, 1.	1.6	75
44	Measurement of the $X(3872)$ production cross section via decays to $J/\psi\eta + \Upsilon\eta$ in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	73
45	Searches for physics beyond the standard model with the $M_{\mathrm{T}2}$ variable in hadronic final states with and without disappearing tracks in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2020, 80, 3.	1.4	70
46	Measurement of the $\overline{\mathrm{t}}\mathrm{t}$ production cross section in the dilepton channel in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	69
47	Search for anomalous production of multilepton events in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	68
48	Search for a standard-model-like Higgs boson with a mass in the range 145 to 1000 GeV at the LHC. European Physical Journal C, 2013, 73, 2469.	1.4	68
49	Measurement of the differential and double-differential Drell-Yan cross sections in proton-proton collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	68
50	Measurement of the $\overline{\mathrm{t}}\mathrm{t}\hat{A}^-$ production cross section, the top quark mass, and the strong coupling constant using dilepton events in pp collisions at. European Physical Journal C, 2019, 79, 368.	1.4	68
51	Long-range and short-range dihadron angular correlations in central PbPb collisions at $\sqrt{s_{\mathrm{NN}}} = 2.76$ TeV. Journal of High Energy Physics, 2011, 2011, 1.	1.6	65
52	Measurement of the sum of WW and WZ production with W+dijet events in pp collisions at $\sqrt{s} = 7$ TeV. European Physical Journal C, 2013, 73, 2283.	1.4	64
53	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.	1.4	64
54	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.	1.6	63

#	ARTICLE	IF	CITATIONS
55	Measurement of the $W+W\bar{a}$ cross section in pp collisions at $\sqrt{s} = 7 \text{ TeV}$ and limits on anomalous $WW\bar{1}^3$ and $WWZ$ couplings. European Physical Journal C, 2013, 73, 1.	1.4	62
56	Measurement of differential cross sections for Higgs boson production in the diphoton decay channel in pp collisions at $\sqrt{s} = 8 \text{ TeV}$ . European Physical Journal C, 2016, 76, 13.	1.4	62
57	Measurement of the inelastic proton-proton cross section at $\sqrt{s} = 13 \text{ TeV}$ . Journal of High Energy Physics, 2018, 2018, 1.	1.6	62
58	Measurement of the ratio of the inclusive 3-jet cross section to the inclusive 2-jet cross section in pp collisions at $\sqrt{s} = 7 \text{ TeV}$ and first determination of the strong coupling constant in the TeV range. European Physical Journal C, 2013, 73, 1.	1.4	60
59	Measurement of the lepton charge asymmetry in inclusive $W$ production in pp collisions at $\sqrt{s} = 7 \text{ TeV}$ . Journal of High Energy Physics, 2011, 2011, 1.	1.6	59
60	Search for anomalous $t\bar{t}$ production in the highly-boosted all-hadronic final state. Journal of High Energy Physics, 2012, 2012, 1.	1.6	58
61	Jet production rates in association with $W$ and $Z$ bosons in pp collisions at $\sqrt{s} = 7 \text{ TeV}$ . Journal of High Energy Physics, 2012, 2012, 1.	1.6	58
62	Studies of jet mass in dijet and $W/Z + \text{jet}$ events. Journal of High Energy Physics, 2013, 2013, 1.	1.6	58

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73	Measurements of the $\sigma(\text{pp} \rightarrow \text{Z}\text{pp})$ production cross section and the $\text{BR}(\text{Z} \rightarrow 4\ell)$ branching fraction, and constraints on anomalous triple gauge couplings at. European Physical Journal C, 2018, 78, 165.	1.4	52
74	Search for exclusive or semi-exclusive $\tilde{\chi}_1^0\tilde{\chi}_1^0$ production and observation of exclusive and semi-exclusive $e^+e^-$ production in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	51
75	Search for the associated production of the Higgs boson with a top-quark pair. Journal of High Energy Physics, 2014, 2014, 1.	1.6	51
76	First measurement of the underlying event activity at the LHC with $\sqrt{s} = 0.9$ TeV. European Physical Journal C, 2010, 70, 555-572.	1.4	50
77	Study of the underlying event at forward rapidity in pp collisions at $\sqrt{s}=0.9, 2.76, 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	50
78	Search for new physics with jets and missing transverse momentum in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2011, 2011, 1.	1.6	49
79	Search for leptonic decays of $W^{\pm}$ bosons in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	49
80	Measurement of pseudorapidity distributions of charged particles in proton-proton collisions at $\sqrt{s} = 8$ TeV by the CMS and TOTEM experiments. European Physical Journal C, 2014, 74, 1.	1.4	49
81	Measurement of the cross section and angular correlations for associated production of a Z boson with b hadrons in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	47
82	Search for new physics with same-sign isolated dilepton events with jets and missing transverse energy at the LHC. Journal of High Energy Physics, 2011, 2011, 1.	1.6	46
83	Search for narrow resonances and quantum black holes in inclusive and b-tagged dijet mass spectra from pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	46
84	Search for heavy bottom-like quarks in $4.9 \text{ fb}^{-1}$ of pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	45
85	Search for microscopic black holes in pp collisions at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	44
86	Identification techniques for highly boosted W bosons that decay into hadrons. Journal of High Energy Physics, 2014, 2014, 1.	1.6	43
87	Measurement of the top-quark mass in $\text{pp} \rightarrow \text{t}\bar{\text{t}} + \text{dilepton}$ events with dilepton final states in pp collisions at $\sqrt{s}=7$ TeV. European Physical Journal C, 2012, 72, 1.	1.4	42
88	Search for electroweak production of charginos and neutralinos using leptonic final states in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	41
89	Measurement of the $\text{pp} \rightarrow \text{t}\bar{\text{t}} + \text{dilepton}$ production cross section in the $e^+e^-$ channel in proton-proton collisions at $\sqrt{s}=7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1.	1.6	41
90	Search for same-sign top-quark pair production at $\sqrt{s} = 7$ TeV and limits on flavour changing neutral currents in the top sector. Journal of High Energy Physics, 2011, 2011, 1.	1.6	40

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91	Measurement of the Higgs boson production rate in association with top quarks in final states with electrons, muons, and hadronically decaying tau leptons at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ . European Physical Journal C, 2021, 81, 378.	1.4	40
92	Search for resonances in the dilepton mass distribution in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2011, 2011, 1.	1.6	39
93	Inclusive b-jet production in pp collisions at $\sqrt{s} = 7\text{TeV}$ . Journal of High Energy Physics, 2012, 2012, 1.	1.6	39
94	Measurement of the $Z/\bar{\nu}\nu + \nu\bar{\nu}$ -jet cross section in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	39
95	Search for the standard model Higgs boson produced in association with a top-quark pair in pp collisions at the LHC. Journal of High Energy Physics, 2013, 2013, 1.	1.6	39
96	Measurement of the ZZ production cross section and search for anomalous couplings in $2\gamma, \gamma\gamma, \nu\bar{\nu}$ final states in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	39
97	Measurement of the production cross sections for a Z boson and one or more b jets in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2014, 2014, 1.	1.6	39
98	Measurement of differential cross sections for $Z + Z$ boson production in association with jets in proton-proton collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ . European Physical Journal C, 2018, 78, 965.	1.4	39
99	Search for heavy stable charged particles in pp collisions at $\sqrt{s} = 7; \text{ext}\{\text{TeV}\}$ . Journal of High Energy Physics, 2011, 2011, 1.	1.6	38
100	Measurement of the top-quark mass in $\overline{t}t$ events with lepton+jets final states in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	38
101	Search for heavy resonances that decay into a vector boson and a Higgs boson in hadronic final states at $\sqrt{s} = 13\text{TeV}$ . European Physical Journal C, 2017, 77, 636.	1.4	38
102	Evidence for associated production of a Higgs boson with a top quark pair in final states with electrons, muons, and hadronically decaying $\bar{l}, l$ , leptons at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	38
103	Measurement of the $\tau^+\tau^-$ production cross section in pp collisions at $\sqrt{s}=7$ TeV using the kinematic properties of events with leptons and jets. European Physical Journal C, 2011, 71, 1.	1.4	37
104	Measurement of the Drell-Yan cross section in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2011, 2011, 1.	1.6	36
105	Discovery potential of top-partners in a realistic composite Higgs model with early LHC data. Journal of High Energy Physics, 2010, 2010, 1.	1.6	35
106	Measurement of the top-quark mass in all-jets $t\bar{t}$ events in pp collisions at $\sqrt{s}=7$ TeV. European Physical Journal C, 2014, 74, 2758.	1.4	35
107	Measurements of production cross sections of the Higgs boson in the four-lepton final state in proton-proton collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ . European Physical Journal C, 2021, 81, 488.	1.4	35
108	Observation of Z decays to four leptons with the CMS detector at the LHC. Journal of High Energy Physics, 2012, 2012, 1.	1.6	34

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109	Search for microscopic black holes in pp collisions at $\sqrt{s} = 7\text{TeV}$ . Journal of High Energy Physics, 2012, 2012, 1.	1.6	34
110	Search for supersymmetry in final states with missing transverse energy and 0, 1, 2, or $\geq 3$ b-quark jets in 7 TeV pp collisions using the variable $\cancel{E}_T$ . Journal of High Energy Physics, 2013, 2013, 1.	1.6	34
111	Measurement of the underlying event in the Drell-Yan process in proton-proton collisions at $\sqrt{s} = 7\text{TeV}$ . European Physical Journal C, 2012, 72, 1.	1.4	33
112	Search for new physics in events with same-sign dileptons and b jets in pp collisions at $\sqrt{s} = 8\text{TeV}$ . Journal of High Energy Physics, 2013, 2013, 1.	1.6	33
113	Search for dark matter produced in association with a leptonically decaying $Z$ boson in proton-proton collisions at $\sqrt{s} = 13\text{TeV}$ . European Physical Journal C, 2021, 81, 13.	1.4	33
114	Search for top squark pair production using dilepton final states in $pp$ collision data collected at $\sqrt{s} = 13\text{TeV}$ . European Physical Journal C, 2021, 81, 3.	1.4	33
115	Measurement of $\overline{B}B$ angular correlations based on secondary vertex reconstruction at $\sqrt{s} = 7\text{TeV}$ . Journal of High Energy Physics, 2011, 2011, 1.	1.6	32
116	Search for supersymmetry in pp collisions at $\sqrt{s} = 7\text{TeV}$ in events with a single lepton, jets, and missing transverse momentum. Journal of High Energy Physics, 2011, 2011, 1.	1.6	32
117	Search in leptonic channels for heavy resonances decaying to long-lived neutral particles. Journal of High Energy Physics, 2013, 2013, 1.	1.6	32
118	Jet and underlying event properties as a function of charged-particle multiplicity in proton-proton collisions at $\sqrt{s} = 7\text{TeV}$ . European Physical Journal C, 2013, 73, 2674.	1.4	32
119	Measurements of the $Z$ production cross sections in the $2u$ channel in proton-proton collisions at $\sqrt{s} = 7\text{TeV}$ and $8\text{TeV}$ . European Physical Journal C, 2015, 75, 511.	1.4	32
120	Searches for pair production of third-generation squarks in $\sqrt{s} = 13\text{TeV}$ pp collisions. European Physical Journal C, 2017, 77, 327.	1.4	32
121	Shape, transverse size, and charged-hadron multiplicity of jets in pp collisions at $\sqrt{s} = 7\text{TeV}$ . Journal of High Energy Physics, 2012, 2012, 1.	1.6	31
122	Measurement of the triple-differential cross section for photon + jets production in proton-proton collisions at $\sqrt{s} = 7\text{TeV}$ . Journal of High Energy Physics, 2014, 2014, 1.	1.6	31
123	Search for top squark pair production in pp collisions at $\sqrt{s} = 13\text{TeV}$ using single lepton events. Journal of High Energy Physics, 2017, 2017, 1.	1.6	31
124	Measurement of Bose-Einstein correlations in pp collisions at $\sqrt{s} = 0.9$ and 7 TeV. Journal of High Energy Physics, 2011, 2011, 1.	1.6	30
125	Search for new physics in events with same-sign dileptons and b-tagged jets in pp collisions at $\sqrt{s} = 7\text{TeV}$ . Journal of High Energy Physics, 2012, 2012, 1.	1.6	30
126	Search for a Higgs boson in the decay channel $H \rightarrow ZZ^* \rightarrow q\overline{q}$ + in pp collisions at $\sqrt{s} = 7\text{TeV}$ . Journal of High Energy Physics, 2012, 2012, 1.	1.6	30



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127	Measurement of the $W$ -boson helicity in top-quark decays from $\overline{\text{t}}$ production in lepton+jets events in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	30
128	The CMS barrel calorimeter response to particle beams from $\sqrt{s}=350$ GeV/c. European Physical Journal C, 2009, 60, 359-373.	1.4	29
129	Search for supersymmetry in events with b jets and missing transverse momentum at the LHC. Journal of High Energy Physics, 2011, 2011, 1.	1.6	29
130	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.	1.6	29
131	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.	1.4	29
132	Search for $\overline{\text{t}}\text{H}$ production in the $\text{H}\rightarrow\text{b}\overline{\text{b}}$ decay channel with leptonic $\overline{\text{t}}$ decays in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	28
133	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.	1.6	28
134	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.	1.4	27
135	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.	0.5	27
136	Measurements of Higgs boson production cross sections and couplings in the diphoton decay channel at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2021, 2021, 1.	1.6	27
137	Search for physics beyond the standard model in opposite-sign dilepton events in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2011, 2011, 1.	1.6	26
138	Search for resonant $\overline{\text{t}}\text{t}$ production in lepton+jets events in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	26
139	Ratios of dijet production cross sections as a function of the absolute difference in rapidity between jets in proton-proton collisions at $\sqrt{s}=7$ TeV. European Physical Journal C, 2012, 72, 1.	1.4	26
140	Search for the standard model Higgs boson in the $\text{H}\rightarrow\text{Z}\gamma$ channel in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	26
141	Measurement of the production cross section for pairs of isolated photons in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	26
142	Measurement of energy flow at large pseudorapidities in pp collisions at $\sqrt{s}=0.9$ and 7 TeV. Journal of High Energy Physics, 2011, 2011, 1.	1.6	25
143	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.	1.6	25
144	Measurement of the $\text{t}\overline{\text{t}}$ production cross section in the $\text{t}\overline{\text{t}}+\text{jets}$ channel in pp collisions at $\sqrt{s}=7$ TeV. European Physical Journal C, 2013, 73, 1.	1.4	24

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145	Measurements of $\sigma(\text{pp} \rightarrow \text{ZZ})$ production cross sections and constraints on anomalous triple gauge couplings at $\sqrt{s} = 13, \text{ext} \{ \text{TeV} \}$ . European Physical Journal C, 2021, 81, 200.	1.4	24
146	Inclusive b-hadron production cross section with muons in pp collisions at $\sqrt{s} = 7, \text{ext} \{ \text{TeV} \}$ . Journal of High Energy Physics, 2011, 2011, 1.	1.6	23
147	Search for large extra dimensions in the diphoton final state at the Large Hadron Collider. Journal of High Energy Physics, 2011, 2011, 1.	1.6	22
148	Search for physics beyond the standard model in events with $l$ , leptons, jets, and large transverse momentum imbalance in pp collisions at $\sqrt{s} = 7 \text{ TeV}$ . European Physical Journal C, 2013, 73, 2493.	1.4	22
149	Search for direct production of supersymmetric partners of the top quark in the all-jets final state in proton-proton collisions at $s = 13 \sqrt{s} = 13 \text{ TeV}$ . Journal of High Energy Physics, 2017, 2017, 1.	1.6	22
150	A Deep Neural Network for Simultaneous Estimation of b Jet Energy and Resolution. Computing and Software for Big Science, 2020, 4, 10.	1.3	21
151	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.	1.6	21
152	Measurement of the inclusive Z cross section via decays to tau pairs in pp collisions at $\sqrt{s} = 7 \text{ TeV}$ . Journal of High Energy Physics, 2011, 2011, 1.	1.6	20
153	Search for exotic resonances decaying into WZ/ZZ in pp collisions at $\sqrt{s} = 7 \text{ TeV}$ . Journal of High Energy Physics, 2013, 2013, 1.	1.6	20
154	Search for supersymmetry in pp collisions at $\sqrt{s} = 7 \text{ TeV}$ in events with a single lepton, jets, and missing transverse momentum. European Physical Journal C, 2013, 73, 2404.	1.4	20
155	Search for $\text{t}\overline{\text{t}}\text{H}$ production in the all-jet final state in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ . Journal of High Energy Physics, 2018, 2018, 1.	1.6	20
156	Search for dark matter in events with energetic, hadronically decaying top quarks and missing transverse momentum at $\sqrt{s} = 13 \text{ TeV}$ . Journal of High Energy Physics, 2018, 2018, 1.	1.6	20
157	Measurement of top quark pair production in association with a Z boson in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ . Journal of High Energy Physics, 2020, 2020, 1.	1.6	20
158	Measurement of differential and integrated fiducial cross sections for Higgs boson production in the four-lepton decay channel in pp collisions at $s = 7 \sqrt{s} = 7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1.	1.6	19
159	Search for a very light NMSSM Higgs boson produced in decays of the 125 GeV scalar boson and decaying into $l$ , leptons in pp collisions at $s = 8 \sqrt{s} = 8 \text{ TeV}$ . Journal of High Energy Physics, 2016, 2016, 1.	1.6	19
160	Search for charged Higgs bosons produced in vector boson fusion processes and decaying into vector boson pairs in proton-proton collisions at $\sqrt{s} = 13, \text{ext} \{ \text{TeV} \}$ . European Physical Journal C, 2021, 81, 723.	1.4	19
161	Search for quark compositeness in dijet angular distributions from pp collisions at $\sqrt{s} = 7 \text{ TeV}$ . Journal of High Energy Physics, 2012, 2012, 1.	1.6	18
162	Measurement of the differential Drell-Yan cross section in proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ . Journal of High Energy Physics, 2019, 2019, 1.	1.6	18

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163	MUSIC: a model-unspecific search for new physics in proton-proton collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ TeV. European Physical Journal C, 2021, 81, 629.	1.4	18
164	Combined searches for the production of supersymmetric top quark partners in proton-proton collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ TeV. European Physical Journal C, 2021, 81, 970.	1.4	18
165	Search for low-mass dilepton resonances in Higgs boson decays to four-lepton final states in proton-proton collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ TeV. European Physical Journal C, 2022, 82, 290.	1.4	18
166	Search for stopped long-lived particles produced in pp collisions at $\sqrt{s} = \text{ext}\{7\text{TeV}\}$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	17
167	Measurement of the $\Lambda_{\text{b}}^0$ lifetime in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	17
168	Probing color coherence effects in pp collisions at $\sqrt{s} = 7, \text{ext}\{\text{TeV}\}$ TeV. European Physical Journal C, 2014, 74, 2901.	1.4	17
169	Search for $Z\tilde{l}^3$ resonances using leptonic and hadronic final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	17
170	Measurement of charged particle spectra in minimum-bias events from proton-proton collisions at $\sqrt{s} = 13, \text{ext}\{\text{TeV}\}$ TeV. European Physical Journal C, 2018, 78, 697.	1.4	17
171	Search for dark matter produced in association with a single top quark or a top quark pair in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	17
172	Measurement of the inclusive production cross sections for forward jets and for dijet events with one forward and one central jet in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	16
173	Measurement of the $\overline{\text{t}}\text{t}$ production cross section in the all-jet final state in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	16
174	Measurement of the hadronic activity in events with a Z and two jets and extraction of the cross section for the electroweak production of a Z with two jets in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	16
175	Search for a fermiophobic Higgs boson in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	15
176	Measurement of the mass difference between top and antitop quarks. Journal of High Energy Physics, 2012, 2012, 1.	1.6	15
177	Search for new physics in events with photons, jets, and missing transverse energy in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	15
178	Measurement of the $\overline{\text{t}}\text{t}\tilde{\text{A}}^{\pm}$ production cross section using events with one lepton and at least one jet in pp collisions at $s = 13, \text{ext}\{\text{TeV}\}$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	1.6	15
179	Search for third-generation leptoquarks and scalar bottom quarks in pp collisions at $\sqrt{s} = 7, \text{TeV}$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	14
180	Measurement of the production cross section for $Z\gamma \rightarrow u\overline{u}\gamma$ in pp collisions at $\sqrt{s} = 7$ TeV and limits on $ZZ\tilde{l}^3$ and $Z\tilde{l}^3\tilde{l}^3$ triple gauge boson couplings. Journal of High Energy Physics, 2013, 2013, 1.	1.6	14

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182	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.	1.6	14
183	Mixed higher-order anisotropic flow and nonlinear response coefficients of charged particles in $\sqrt{s_{NN}} = 2.76$ and $5.02$ TeV collisions at $\sqrt{s_{NN}} = 2.76$ and $5.02$ TeV. European Physical Journal C, 2020, 80, 534.	1.4	14
184	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.	1.6	14
185	Search for long-lived particles decaying to leptons with large impact parameter in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2022, 82, 153.	1.4	14
186	Search for light resonances decaying into pairs of muons as a signal of new physics. Journal of High Energy Physics, 2011, 2011, 1.	1.6	13
187	Measurement of the underlying event activity in pp collisions at $\sqrt{s} = 0.9$ and $7$ TeV with the novel jet-area/median approach. Journal of High Energy Physics, 2012, 2012, 1.	1.6	13
188	Search for heavy quarks decaying into a top quark and a W or Z boson using lepton + jets events in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2013, 2013, 1.	1.6	13
189	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.	1.6	13
190	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.	1.6	13
191	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.	1.6	13
192	Search for supersymmetry in final states with two or three soft leptons and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	13
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194	Search for dark matter produced in association with a Higgs boson decaying to $\tilde{\chi}_1^0$ or $\tilde{\chi}_1^\pm$ , $\tilde{\nu}_\tau$ at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	12
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197	Search for a right-handed W boson and a heavy neutrino in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	12
198	Search for new physics with long-lived particles decaying to photons and missing energy in pp collisions at $\sqrt{s}=7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	11

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200	Search for the standard model Higgs boson in the $H \rightarrow ZZ \rightarrow 4\ell$ decay channel in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	11
201	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.	1.6	11
202	Search for supersymmetry in events with a lepton, a photon, and large missing transverse energy in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2011, 2011, 1.	1.6	10
203	Search for a heavy resonance decaying into a Z boson and a vector boson in the $u\bar{u}$ final state. Journal of High Energy Physics, 2018, 2018, 1.	1.6	10
204	Search for a heavy vector resonance decaying to a $Z\gamma$ boson and a Higgs boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2021, 81, 688.	1.4	9
205	Search for a heavy resonance decaying into a Z boson and a Z or W boson in $2\ell 2q$ final states at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	1.6	8
206	Search for the standard model Higgs boson produced in association with W and Z bosons in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	7
207	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.	1.6	7
208	Measurement of the cross section for production of $b\bar{b}$ decaying to muons in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2012, 2012, 1.	1.6	6
209	Search for the associated production of the Higgs boson with a top-quark pair. , 2014, 2014, 1.		6
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211	Search for heavy resonances decaying to ZZ or ZW and axion-like particles mediating nonresonant ZZ or ZH production at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	6
212	Search for the pair production of light top squarks in the $e^+e^- \rightarrow t\bar{t}$ final state in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2019, 2019, 1.	1.6	5
213	Measurement of energy flow at large pseudorapidities in pp collisions at ( $\sqrt{s} = 0.9$ ) and 7 TeV. , 2011, 2011, 1.		5
214	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.	1.4	5
215	Search for flavor-changing neutral current interactions of the top quark and the Higgs boson decaying to a bottom quark-antiquark pair at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	5
216	Search for long-lived particles decaying into muon pairs in proton-proton collisions at $\sqrt{s} = 13$ TeV collected with a dedicated high-rate data stream. Journal of High Energy Physics, 2022, 2022, .	1.6	5

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217	Measurement and QCD analysis of double-differential inclusive jet cross sections in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	5
218	Search for electroweak production of charginos and neutralinos in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	5
219	Search for pair production of excited top quarks in the lepton + jets final state. Journal of High Energy Physics, 2014, 2014, 1.	1.6	4
220	Search for higgsinos decaying to two Higgs bosons and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, .	1.6	4
221	Measurements of the $(\text{p})\text{p} \rightarrow \text{Z}\text{Z}$ production cross section and the $(\text{Z} \rightarrow 4\ell)$ branching fraction, and constraints on anomalous triple gauge couplings at $(\sqrt{s} = 13, \text{ext } \{\text{TeV}\})$ . , 2018, 78, 1.		3
222	Measurements of angular distance and momentum ratio distributions in three-jet and $\{\text{ext } \{\text{Z}\}\}$ + two-jet final states in $\{\text{ext } \{\text{p}\}\}\{\text{ext } \{\text{p}\}\}$ collisions. European Physical Journal C, 2021, 81, 852.	1.4	2
223	Search for new physics in events with same-sign dileptons and b jets in pp collisions at $(\sqrt{s}=8)$ TeV. , 2013, 2013, 1.		2
224	Search for a heavy resonance decaying into a top quark and a W boson in the lepton+jets final state at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	2
225	Measurement of the inclusive $\overline{\text{t}}\text{t}$ production cross section in proton-proton collisions at $\sqrt{s} = 5.02$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	2
226	Search for heavy resonances decaying to a pair of Lorentz-boosted Higgs bosons in final states with leptons and a bottom quark pair at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, .	1.6	2
227	Study of dijet events with large rapidity separation in proton-proton collisions at $\sqrt{s} = 2.76$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	1.6	1
228	Observation of $B^0 \rightarrow \text{S}\psi(2\text{S})K^0_{\text{S}}\psi^+\psi^-$ and $B^0_{\text{S}} \rightarrow \text{S}\psi(2\text{S})K^0_{\text{S}}\psi^+\psi^-$ decays. European Physical Journal C, 2022, 82, .	1.4	1