

# Jean-Roch Valery Vlimant

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7039525/publications.pdf>

Version: 2024-02-01

187  
papers

8,472  
citations

41344

49  
h-index

51608

86  
g-index

189  
all docs

189  
docs citations

189  
times ranked

8009  
citing authors

#	ARTICLE	IF	CITATIONS
1	The Dark Machines Anomaly Score Challenge: Benchmark Data and Model Independent Event Classification for the Large Hadron Collider. SciPost Physics, 2022, 12, .	4.9	43
2	Inclusive and differential cross section measurements of single top quark production in association with a Z boson in proton-proton collisions at $\sqrt{s} = 13$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	6
3	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.	4.7	5
4	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.	3.9	14
5	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.	4.7	1
6	Search for low-mass dilepton resonances in Higgs boson decays to four-lepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2022, 82, 290.	3.9	18
7	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.	4.7	13
8	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, .	4.7	5
9	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.	4.7	12
10	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.	4.7	2
11	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.	4.7	6
12	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.	4.7	5
13	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.	4.7	5
14	Measurement of the inclusive $\overline{t}t$ production cross section in proton-proton collisions at $\sqrt{s} = 5.02$ TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	2
15	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, .	4.7	2
16	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, .	4.7	4
17	Observation of $B^0 \rightarrow \psi(2S) K^0_{\text{S}} \ell^+ \ell^-$ and $B^0_{\text{S}} \rightarrow \psi(2S) K^0_{\text{S}} \ell^+ \ell^-$ decays. European Physical Journal C, 2022, 82, .	3.9	1
18	Particle-based fast jet simulation at the LHC with variational autoencoders. Machine Learning: Science and Technology, 2022, 3, 035003.	5.0	11

#	ARTICLE	IF	CITATIONS
19	Embedding of particle tracking data using hybrid quantum-classical neural networks. EPJ Web of Conferences, 2021, 251, 03065.	0.3	1
20	Search for dark matter produced in association with a leptonically decaying $\mathbf{Z}$ boson in proton-proton collisions at $\sqrt{s}=13,\text{ext}\{\text{TeV}\}$ . European Physical Journal C, 2021, 81, 13.	3.9	33
21	Graph neural networks in particle physics. Machine Learning: Science and Technology, 2021, 2, 021001.	5.0	87
22	Search for top squark pair production using dilepton final states in $\mathbf{pp}$ collision data collected at $\sqrt{s}=13,\text{ext}\{\text{TeV}\}$ . European Physical Journal C, 2021, 81, 3.	3.9	33
23	Adversarially Learned Anomaly Detection on CMS open data: re-discovering the top quark. European Physical Journal Plus, 2021, 136, 1.	2.6	38
24	Quantum Track Reconstruction Algorithms for non-HEP applications. , 2021, , .		0
25	Data Analysis with GPU-Accelerated Kernels. , 2021, , .		0
26	Measurements of $\mathbf{pp} \rightarrow \mathbf{Z} \mathbf{Z}$ 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.	3.9	24
27	Quantum machine learning in high energy physics. Machine Learning: Science and Technology, 2021, 2, 011003.	5.0	50
28	Development and validation of HERWIG <sup>7</sup> tunes from CMS underlying-event measurements. European Physical Journal C, 2021, 81, 312.	3.9	12
29	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.	3.9	40
30	MLPF: efficient machine-learned particle-flow reconstruction using graph neural networks. European Physical Journal C, 2021, 81, 1.	3.9	39
31	Diolkos. , 2021, , .		0
32	Analysis-Specific Fast Simulation at the LHC with Deep Learning. Computing and Software for Big Science, 2021, 5, 15.	2.9	7
33	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.	3.9	35
34	Measurements of Higgs boson production cross sections and couplings in the diphoton decay channel at $\sqrt{s} = 13\text{ TeV}$ . Journal of High Energy Physics, 2021, 2021, 1.	4.7	27
35	MUSiC: a model-unspecific search for new physics in proton-proton collisions at $\sqrt{s} = 13,\text{ext}\{\text{TeV}\}$ . European Physical Journal C, 2021, 81, 629.	3.9	18
36	Search for a heavy vector resonance decaying to a $\mathbf{Z}_{\text{Higgs}}$ boson and a Higgs boson in proton-proton collisions at $\sqrt{s} = 13,\text{ext}\{\text{TeV}\}$ . European Physical Journal C, 2021, 81, 688.	3.9	9

#	ARTICLE	IF	CITATIONS
37	Search for charged Higgs bosons produced in vector boson fusion processes and decaying into vector boson pairs in proton–proton collisions at $\sqrt{s} = 13, \text{TeV}$ . European Physical Journal C, 2021, 81, 723.	3.9	19
38	Measurements of angular distance and momentum ratio distributions in three-jet and $Z + \text{two-jet}$ final states in $pp$ collisions. European Physical Journal C, 2021, 81, 852.	3.9	2
39	Precision luminosity measurement in proton–proton collisions at $\sqrt{s} = 13, \text{TeV}$ in 2015 and 2016 at CMS. European Physical Journal C, 2021, 81, 800.	3.9	123
40	Graph Neural Network for Object Reconstruction in Liquid Argon Time Projection Chambers. EPJ Web of Conferences, 2021, 251, 03054.	0.3	6
41	Performance of a geometric deep learning pipeline for HL-LHC particle tracking. European Physical Journal C, 2021, 81, 1.	3.9	23
42	Combined searches for the production of supersymmetric top quark partners in proton–proton collisions at $\sqrt{s} = 13, \text{TeV}$ . European Physical Journal C, 2021, 81, 970.	3.9	18
43	The LHC Olympics 2020 a community challenge for anomaly detection in high energy physics. Reports on Progress in Physics, 2021, 84, 124201.	20.1	70
44	Charged particle tracking with quantum annealing optimization. Quantum Machine Intelligence, 2021, 3, 1.	4.8	10
45	Hybrid quantum classical graph neural networks for particle track reconstruction. Quantum Machine Intelligence, 2021, 3, 1.	4.8	20
46	Generative Adversarial Networks for fast simulation. Journal of Physics: Conference Series, 2020, 1525, 012064.	0.4	5
47	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
48	Particle Generative Adversarial Networks for full-event simulation at the LHC and their application to pileup description. Journal of Physics: Conference Series, 2020, 1525, 012081.	0.4	17
49	Calorimetry with deep learning: particle simulation and reconstruction for collider physics. European Physical Journal C, 2020, 80, 1.	3.9	65
50	Quantum adiabatic machine learning by zooming into a region of the energy surface. Physical Review A, 2020, 102, .	2.5	15
51	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
52	Interaction networks for the identification of boosted $H \rightarrow b\bar{b} \rightarrow \tilde{A}^0$ decays. Physical Review D, 2020, 102, .	4.7	37
53	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.	4.7	20
54	JEDI-net: a jet identification algorithm based on interaction networks. European Physical Journal C, 2020, 80, 1.	3.9	81

#	ARTICLE	IF	CITATIONS
55	Mixed higher-order anisotropic flow and nonlinear response coefficients of charged particles in $\sqrt{s_{NN}} = 2.76$ and 5.02 TeV PbPb collisions at $\sqrt{s_{NN}} = 2.76$ and 5.02 TeV. European Physical Journal C, 2020, 80, 534.	3.9	14
56	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.	3.9	78
57	Searches for physics beyond the standard model with the $M_{T2}$ 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.	3.9	70
58	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
59	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
60	A multi-dimensional search for new heavy resonances decaying to boosted $W^+W^-$ , $W^+Z$ , or $W^-Z$ boson pairs in the dijet final state at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2020, 80, 237.	3.9	31
61	The Tracking Machine Learning Challenge: Accuracy Phase. The Springer Series on Challenges in Machine Learning, 2020, , 231-264.	10.4	23
62	Automatic log analysis with NLP for the CMS workflow handling. EPJ Web of Conferences, 2020, 245, 03006.	0.3	6
63	Particle Track Reconstruction with Quantum Algorithms. EPJ Web of Conferences, 2020, 245, 09013.	0.3	16
64	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
65	Measurement of differential cross sections and charge ratios for t-channel single top quark production in proton-proton collisions at $\sqrt{s} = 13$ TeV. European Physical Journal C, 2020, 80, 370.	3.9	22
66	Measurement of $\sigma_{t\bar{t}}$ normalised multi-differential cross sections in $pp$ collisions at $\sqrt{s} = 13$ TeV, and simultaneous determination of the strong coupling strength, top quark pole mass, and parton distribution functions. European Physical Journal C, 2020, 80, 1.	3.9	33
67	New Physics Agnostic Selections For New Physics Searches. EPJ Web of Conferences, 2020, 245, 06039.	0.3	3
68	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.	4.7	17
69	Pileup mitigation at the Large Hadron Collider with graph neural networks. European Physical Journal Plus, 2019, 134, 1.	2.6	43
70	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
71	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
72	Variational autoencoders for new physics mining at the Large Hadron Collider. Journal of High Energy Physics, 2019, 2019, 1.	4.7	94

#	ARTICLE	IF	CITATIONS
73	Measurement of the $\sigma(\text{t}\bar{\text{t}})$ 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.	3.9	68
74	Search for dark matter produced in association with a Higgs boson decaying to a pair of bottom quarks in proton-proton collisions at $\sqrt{s}=13\text{ TeV}$ . European Physical Journal C, 2019, 79, 280.	3.9	29
75	Search for $\text{t}\bar{\text{t}}\text{H}$ production in the $\text{H}\rightarrow\text{b}\bar{\text{b}}$ decay channel with leptonic $\text{t}\bar{\text{t}}$ decays in proton-proton collisions at $\sqrt{s}=13\text{ TeV}$ . Journal of High Energy Physics, 2019, 2019, 1.	4.7	28
76	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
77	The TrackML high-energy physics tracking challenge on Kaggle. EPJ Web of Conferences, 2019, 214, 06037.	0.3	6
78	Improving data quality monitoring via a partnership of technologies and resources between the CMS experiment at CERN and industry. EPJ Web of Conferences, 2019, 214, 01007.	0.3	4
79	Large-Scale Distributed Training Applied to Generative Adversarial Networks for Calorimeter Simulation. EPJ Web of Conferences, 2019, 214, 06025.	0.3	4
80	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.	4.7	18
81	Anomaly detection using Deep Autoencoders for the assessment of the quality of the data acquired by the CMS experiment. EPJ Web of Conferences, 2019, 214, 06008.	0.3	8
82	Measurements of differential Z boson production cross sections in proton-proton collisions at $\sqrt{s}=13\text{ TeV}$ . Journal of High Energy Physics, 2019, 2019, 1.	4.7	28
83	TrackML : a tracking Machine Learning challenge. , 2019, , .		0
84	Automatic log analysis with NLP for the CMS workflow handling [Slides]. , 2019, , .		0
85	Search for new physics in events with a leptonically decaying Z boson and a large transverse momentum imbalance in proton-proton collisions at $\sqrt{s}=13\text{ TeV}$ . European Physical Journal C, 2018, 78, 291.	3.9	27
86	Measurements of the $\text{pp}\rightarrow\text{Z}\ell\ell$ production cross section and the $\text{Z}\rightarrow\ell\ell$ branching fraction, and constraints on anomalous triple gauge couplings at. European Physical Journal C, 2018, 78, 165.	3.9	52
87	Search for electroweak production of charginos and neutralinos in multilepton final states in proton-proton collisions at $\sqrt{s}=13\text{ TeV}$ . Journal of High Energy Physics, 2018, 2018, 1.	4.7	63
88	Search for $\text{t}\bar{\text{t}}\text{H}$ 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.	4.7	20
89	The HEP.TrkX Project: Deep Learning for Particle Tracking. Journal of Physics: Conference Series, 2018, 1085, 042023.	0.4	12
90	TrackML: A High Energy Physics Particle Tracking Challenge. , 2018, , .		2

#	ARTICLE	IF	CITATIONS
91	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
92	Search for decays of stopped exotic long-lived particles produced in proton-proton collisions at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	12
93	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
94	Search for narrow and broad dijet resonances in proton-proton collisions at $\sqrt{s}=13$ TeV and constraints on dark matter mediators and other new particles. Journal of High Energy Physics, 2018, 2018, 1.	4.7	82
95	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.	4.7	17
96	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
97	Machine Learning in High Energy Physics Community White Paper. Journal of Physics: Conference Series, 2018, 1085, 022008.	0.4	94
98	Measurement of differential cross sections for $Z$ boson production in association with jets in proton-proton collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2018, 78, 965.	3.9	39
99	Search for a heavy resonance decaying into a Z boson and a Z or W boson in $2\ell$ final states at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	8
100	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
101	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
102	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
103	Measurement of the $\sigma(\text{pp} \rightarrow Z/\gamma^* \rightarrow \ell^+\ell^-)$ cross section in pp collisions at $\sqrt{s}=13$ TeV and validation of $\sqrt{s}=13$ TeV. European Physical Journal C, 2018, 78, 708.	3.9	10
104	Search for dark matter produced in association with a Higgs boson decaying to $\tilde{l}^3$ or $\tilde{l}, +\tilde{l}, \tilde{\nu}$ at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	12
105	Search for a heavy resonance decaying into a Z boson and a vector boson in the $u\bar{u}q\bar{q}$ final state. Journal of High Energy Physics, 2018, 2018, 1.	4.7	10
106	Evidence for associated production of a Higgs boson with a top quark pair in final states with electrons, muons, and hadronically decaying $\tilde{l}$ , leptons at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	38
107	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
108	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



#	ARTICLE	IF	CITATIONS
109	Measurement of the inelastic proton-proton cross section at $\sqrt{s}=13$ TeV. Journal of High Energy Physics, 2018, 2018, 1.	4.7	62
110	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
111	Measurements of the $(p \rightarrow p) \rightarrow Z$ production cross section and the $(Z \rightarrow \ell \ell)$ branching fraction, and constraints on anomalous triple gauge couplings at $(\sqrt{s} = 13, \text{TeV})$ . , 2018, 78, 1.		3
112	Next-Generation Exascale Network Integrated Architecture for Global Science [Invited]. Journal of Optical Communications and Networking, 2017, 9, A162.	4.8	4
113	Measurements of the $t \bar{t} \rightarrow \ell \ell + \text{jets}$ production cross section in lepton+jets final states in pp collisions at 8 TeV and ratio of 8 to 7 TeV cross sections. European Physical Journal C, 2017, 77, 15.	3.9	34
114	Measurement of the $t \bar{t} \rightarrow \ell \ell + \text{jets}$ production cross section using events in the $e \mu e \frac{1}{4}$ final state in pp collisions at $\sqrt{s}=13$ TeV. European Physical Journal C, 2017, 77, 172.	3.9	40
115	Measurement and QCD analysis of double-differential inclusive jet cross sections in pp collisions at $s = 8$ TeV and cross section ratios to 2.76 and 7 TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	54
116	A search for new phenomena in pp collisions at $\sqrt{s} = 13$ TeV in final states with missing transverse momentum and at least one jet using the $\alpha_{\text{T}}$ variable. European Physical Journal C, 2017, 77, 294.	3.9	29
117	The HEP.TrkX Project: deep neural networks for HL-LHC online and offline tracking. EPJ Web of Conferences, 2017, 150, 00003.	0.3	28
118	Solving a Higgs optimization problem with quantum annealing for machine learning. Nature, 2017, 550, 375-379.	27.8	143
119	Measurement of double-differential cross sections for top quark pair production in pp collisions at $\sqrt{s} = 8$ TeV and impact on parton distribution functions. European Physical Journal C, 2017, 77, 459.	3.9	52
120	Measurement of the jet mass in highly boosted $t \bar{t}$ events from pp collisions at $\sqrt{s}=8$ TeV. European Physical Journal C, 2017, 77, 467.	3.9	23
121	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
122	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
123	Search for massive resonances decaying into WW, WZ or ZZ bosons in proton-proton collisions at $s = 13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	22
124	Search for direct production of supersymmetric partners of the top quark in the all-jets final state in proton-proton collisions at $s = 13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	22
125	Search for top squark pair production in pp collisions at $s = 13$ TeV using single lepton events. Journal of High Energy Physics, 2017, 2017, 1.	4.7	31
126	Measurement of the $t \bar{t} \rightarrow \ell \ell + \text{jets}$ production cross section using events with one lepton and at least one jet in pp collisions at $s = 13$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	15



#	ARTICLE	IF	CITATIONS
127	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
128	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
129	Track reconstruction at LHC as a collaborative data challenge use case with RAMP. EPJ Web of Conferences, 2017, 150, 00015.	0.3	5
130	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
131	SDN-NGenIA, a software defined next generation integrated architecture for HEP and data intensive science. Journal of Physics: Conference Series, 2017, 898, 112001.	0.4	0
132	Software and experience with managing workflows for the computing operation of the CMS experiment. Journal of Physics: Conference Series, 2017, 898, 052025.	0.4	0
133	MonALISA, an agent-based monitoring and control system for the LHC experiments. Journal of Physics: Conference Series, 2017, 898, 092055.	0.4	2
134	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
135	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
136	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
137	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
138	Measurement of inclusive jet production and nuclear modifications in pPb collisions at $\sqrt{s_{\mathrm{NN}}}=5.02$ TeV. European Physical Journal C, 2016, 76, 372.	3.9	29
139	Measurement of differential and integrated fiducial cross sections for Higgs boson production in the four-lepton decay channel in pp collisions at $\sqrt{s}=7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	19
140	Measurement of the $t\bar{t}\hat{A}^-$ production cross section in the $e\bar{e}\gamma$ channel in proton-proton collisions at $\sqrt{s}=7$ and 8 TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	41
141	Measurement of $t\bar{t}\hat{A}^-$ production with additional jet activity, including $b$ quark jets, in the dilepton decay channel using pp collisions at $\sqrt{s} = 8$ TeV. European Physical Journal C, 2016, 76, 379.	3.9	34
142	Measurement of the $t\bar{t}\hat{A}^-$ production cross section in the all-jets final state in pp collisions at $\sqrt{s}=8$ TeV. European Physical Journal C, 2016, 76, 128.	3.9	41
143	Event generator tunes obtained from underlying event and multiparton scattering measurements. European Physical Journal C, 2016, 76, 155.	3.9	499
144	Search for a very light NMSSM Higgs boson produced in decays of the 125 GeV scalar boson and decaying into $\tilde{l}$ , leptons in pp collisions at $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	19

#	ARTICLE	IF	CITATIONS
145	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.	3.9	62
146	SDN Next Generation Integrated Architecture For HEP and Global Science. , 2016, , .		1
147	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.	4.7	92
148	Named Data Networking in Climate Research and HEP Applications. Journal of Physics: Conference Series, 2015, 664, 052033.	0.4	11
149	Measurement of the differential cross section for top quark pair production in pp collisions at $\sqrt{s}=8\text{ TeV}$ . European Physical Journal C, 2015, 75, 542.	3.9	191
150	Measurements of the $\mathcal{Z}\mathcal{Z}$ production cross sections in the $2u\bar{2}l\bar{1}\gamma/2$ channel in proton-proton collisions at $\sqrt{s}=7\text{ TeV}$ and $8\text{ TeV}$ . European Physical Journal C, 2015, 75, 511.	3.9	32
151	Measurement of electroweak production of two jets in association with a Z boson in proton-proton collisions at $\sqrt{s}=8\text{ TeV}$ . European Physical Journal C, 2015, 75, 66.	3.9	31
152	Measurement of the ratio of the production cross sections times branching fractions of $B_c^{\pm} \rightarrow \ell^{\pm} \nu_{\ell} \bar{\nu}_{\tau}$ and $B^{\pm} \rightarrow \ell^{\pm} \nu_{\ell} \bar{\nu}_{\tau}$ in $\bar{p}p$ collisions at $\sqrt{s}=8\text{ TeV}$ . European Physical Journal C, 2015, 75, 511.	4.7	17
153	Search for dark matter, extra dimensions, and unparticles in monojet events in proton-proton collisions at $\sqrt{s}=8\text{ TeV}$ . European Physical Journal C, 2015, 75, 235.	3.9	320
154	Constraints on parton distribution functions and extraction of the strong coupling constant from the inclusive jet cross section in pp collisions at $\sqrt{s}=7\text{ TeV}$ . European Physical Journal C, 2015, 75, 288.	3.9	54
155	Nuclear effects on the transverse momentum spectra of charged particles in pPb collisions at $\sqrt{s_{NN}}=5.02\text{ TeV}$ . European Physical Journal C, 2015, 75, 237.	3.9	58
156	Distributions of topological observables in inclusive three- and four-jet events in pp collisions at $\sqrt{s}=7\text{ TeV}$ . European Physical Journal C, 2015, 75, 302.	3.9	6
157	Constraints on the pMSSM, AMSB model and on other models from the search for long-lived charged particles in proton-proton collisions at $\sqrt{s}=8\text{ TeV}$ . European Physical Journal C, 2015, 75, 325.	3.9	43
158	Measurement of top quark-antiquark pair production in association with a W or Z boson in pp collisions at $\sqrt{s}=8\text{ TeV}$ . European Physical Journal C, 2014, 74, 3060.	3.9	43
159	Measurement of pseudorapidity distributions of charged particles in proton-proton collisions at $\sqrt{s}=8\text{ TeV}$ by the CMS and TOTEM experiments. European Physical Journal C, 2014, 74, 1.	3.9	49
160	Searches for electroweak production of charginos, neutralinos, and sleptons decaying to leptons and W, Z, and Higgs bosons in pp collisions at $8\text{ TeV}$ . European Physical Journal C, 2014, 74, 3036.	3.9	241
161	Observation of the diphoton decay of the Higgs boson and measurement of its properties. European Physical Journal C, 2014, 74, 3076.	3.9	342
162	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

[illegible]

#	ARTICLE	IF	CITATIONS
181	Measurement of the Drell-Yan cross section in pp collisions at $\sqrt{s} = 7$ TeV. Journal of High Energy Physics, 2011, 2011, 1.	4.7	36
182	Measurement of the inclusive W and Z production cross sections in pp collisions at $\sqrt{s} = 7$ TeV with the CMS experiment. Journal of High Energy Physics, 2011, 2011, 1.	4.7	158
183	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.	4.7	25
184	Measurement of energy flow at large pseudorapidities in pp collisions at ( $\sqrt{s} = 0.9$ ) and 7 TeV. , 2011, 2011, 1.		5
185	CMS tracking performance results from early LHC operation. European Physical Journal C, 2010, 70, 1165-1192.	3.9	120
186	Source-Agnostic Gravitational-Wave Detection with Recurrent Autoencoders. Machine Learning: Science and Technology, 0, , .	5.0	4
187	Source-Agnostic Gravitational-Wave Detection with Recurrent Autoencoders. Machine Learning: Science and Technology, 0, , .	5.0	2