

Rebeca Gonzalez Suarez - Publication List

Contents

Metrics, 1 • Main publications in peer-reviewed journals, 2 • Publications from top, 4 • Other, 5 • Conference proceedings, 81 • Public Analysis Summaries, 82 • Public top results, 85 • Internal Analysis Notes, 86.

Metrics

As of November 16, 2016:

	Citeable papers	Published only
Number of papers	591	532
Number of citations	53772	53542
Average citations per paper	91.0	100.6
h index	112	112

Breakdown of papers by citations:

	Citeable papers	Published only
Renowned papers (500+)	9	9
Famous papers (250-499)	21	21
Very well-known papers (100-249)	100	100
Well-known papers (50-99)	159	158
Known papers (10-49)	199	196
Less known papers (1-9)	78	46
Unknown papers (0)	25	2

The contributions listed here are labeled when it corresponds using the following convention:

[PA = Primary Author; ED = Editor; C = Contributor; R = Review]

Additionally to this, the ten most relevant peer-reviewed publications have a longer explanation of why they are chosen as such.

In addition to what is presented in the following, I am an author of all the public results from the CMS collaboration since 2006. They full list can be consulted at

<https://cds.cern.ch/collection/CMS>

■ Main publications in peer-reviewed journals

Publications in which I have had a personal contribution, in reverse chronological order. The ten most relevant publications are marked with a ★ sign.

Measurement of the transverse momentum spectrum of the Higgs boson produced in pp collisions at $\sqrt{s} = 8$ TeV using H to WW decays, *CMS Collaboration (Serguei Chatrchyan et al.)*, arXiv:1606.01522, Submitted to J. High Energy Phys [R - Higgs to WW]

Measurement of the W boson helicity fractions in the decays of top quark pairs to lepton+jets final states produced in pp collisions at $\sqrt{s} = 8$ TeV, *CMS Collaboration (Serguei Chatrchyan et al.)*, arXiv:1605.09047, Accepted by Phys. Lett. B. [R - ARC]

Search for Higgs boson off-shell production in proton-proton collisions at 7 and 8 TeV and derivation of constraints on its total decay width, *CMS Collaboration (Serguei Chatrchyan et al.)*, arXiv:1605.02329, JHEP 09 (2016) 051 [R - Higgs to WW]

500th paper of CMS

Search for s channel single top quark production in pp collisions at $\sqrt{s} = 7$ and 8 TeV, *CMS Collaboration (Serguei Chatrchyan et al.)*, arXiv:1603.02555, JHEP 09 (2016) 027 [R - Single Top]

Search for anomalous single top quark production in association with a photon in pp collisions at $\sqrt{s} = 8$ TeV, *CMS Collaboration (Serguei Chatrchyan et al.)*, arXiv:1511.03951, JHEP 04 (2016) 035 [R - Single Top]

Measurement of top quark polarisation in t-channel single top quark production, *CMS Collaboration (Serguei Chatrchyan et al.)*, arXiv:1511.02138, JHEP 04 (2016) 073 [R - Single Top]

★ **Search for the associated production of a Higgs boson with a single top quark in proton-proton collisions at $\sqrt{s} = 8$ TeV**, *CMS Collaboration (Serguei Chatrchyan et al.)*, arXiv:1509.08159, JHEP06(2016)177 [C, R-ARC]

Cited by 11.

Measurement of the Charge Asymmetry in Top Quark Pair Production in pp Collisions at $\sqrt{s} = 8$ TeV using a Template Method, *CMS Collaboration (Serguei Chatrchyan et al.)*, arXiv:1508.03862, Phys. Rev. D 93, 034014 (2016) [R-ARC]

Search for a standard model Higgs boson produced in association with a top-quark pair and decaying to bottom quarks using a matrix element method, *CMS Collaboration (Serguei Chatrchyan et al.)*, arXiv:1502.02485, Eur. Phys. J. C 75 (2015) 251 [R-ARC]

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 TeV, *CMS Collaboration (Serguei Chatrchyan et al.)*, arXiv:1412.8662, Eur. Phys. J. C 75 (2015) 212 [C]

★ **Constraints on the spin-parity and anomalous HVV couplings of the Higgs boson in pro-**

ton collisions at 7 and 8 TeV, *CMS Collaboration (Serguei Chatrchyan et al.)*, arXiv:1411.3441, Phys. Rev. D 92, 012004 (2015) [PA, ED]
Cited by [154](#) (100+).

Measurement of the W boson helicity in events with a single reconstructed top quark in pp collisions at $\sqrt{s}=8$ TeV, *CMS Collaboration (Serguei Chatrchyan et al.)*, arXiv:1410.1154, JHEP01(2015)053 [R - Single Top]

★ **Search for monotop signatures in proton-proton collisions at $\sqrt{s}=8$ TeV**, *CMS Collaboration (Serguei Chatrchyan et al.)*, arXiv:1410.1149, Phys. Rev. Lett. 114, 101801 (2015) [R - Chair of the Review]
Cited by 41.

★ **Observation of the associated production of a single top quark and a W boson in pp collisions at $\sqrt{s}=8$ TeV**, *CMS Collaboration (Serguei Chatrchyan et al.)*, arXiv:1401.2942, Phys. Rev. Lett. 112, 231802. [PA]
Cited by [105](#) (100+).

Measurement of the t-channel single-top-quark production cross section and of the $|V_{tb}|$ CKM matrix element in pp collisions at $\sqrt{s}=8$ TeV, *CMS Collaboration (Serguei Chatrchyan et al.)*, arXiv:1403.7366, JHEP 06 (2014) 090 [R - Single top]

Searches for electroweak production of charginos, neutralinos, and sleptons decaying to leptons and W, Z, and Higgs bosons in pp collisions at 8 TeV, *CMS Collaboration (Serguei Chatrchyan et al.)*, arXiv:1405.7570, Eur. Phys. J. C 74 (2014) [R-ARC]

★ **Measurement of Higgs boson production and properties in the WW decay channel with leptonic final states**, *CMS Collaboration (Serguei Chatrchyan et al.)*, arXiv:1312.1129, JHEP 01(2014)096 [PA]
Cited by [285](#) (250+).

Snowmass 2013 Top quark working group report, *Top Quark Working Group Collaboration*, arXiv:1311.2028 [C]

★ **Evidence for associated production of a single top quark and W boson in pp collisions at 7 TeV**, *CMS Collaboration (Serguei Chatrchyan et al.)*, arXiv:1209.3489, Phys. Rev. Lett. 110, 022003 (2013) [PA, ED]
Cited by [121](#) (100+).

★ **Search for the standard model Higgs boson decaying to a W pair in the fully leptonic final state in pp collisions at $\sqrt{s}=7$ TeV**, *CMS Collaboration (Serguei Chatrchyan et al.)*, arXiv:1202.1489, Phys.Lett. B 710 (2012) 91-113 [C]
Cited by [160](#) (100+).

Search for electroweak production of charginos and neutralinos using leptonic final states in pp collisions at $\sqrt{s}=7$ TeV, *CMS Collaboration (Serguei Chatrchyan et al.)*, arXiv:1209.6620,

JHEP 1211 (2012) 147 [R-ARC]

★ **Search for physics beyond the standard model in events with a Z boson, jets, and missing transverse energy in pp collisions at $\sqrt{s} = 7$ TeV**, *CMS Collaboration (Serguei Chatrchyan et al.)*, arXiv:1204.3774, Physics Letters B 716 (2012) 260-284 [R-ARC]
Cited by 50 (50+).

★ **Measurement of the $t\bar{t}$ Production Cross Section in pp Collisions at 7 TeV in Lepton + Jets Events Using b-quark Jet Identification**, *CMS Collaboration (Serguei Chatrchyan et al.)*, Phys.Rev. D84 (2011) 092004, arXiv:1108.3773 [C]
Cited by [126](#) (100+).

★ **Measurement of W^+W^- Production and Search for the Higgs Boson in pp Collisions at $\sqrt{s} = 7$ TeV**, *CMS Collaboration (Serguei Chatrchyan et al.)*, Phys.Lett. B 699 (2011) 25-47, arXiv:1102.5429 [C]
Cited by [166](#) (100+).

Publications from top

Publications submitted to journals during my period as convener of the top quark physics analysis group in CMS, in reverse chronological order:

Measurement of the $t\bar{t}$ production cross section using events in the $e\mu$ final state in pp collisions at $\sqrt{s} = 13$ TeV, *CMS Collaboration (Vardan Khachatryan et al.)*, Submitted to Eur. Phys. J. C., arXiv:1611.04040

Measurement of the mass difference between top quark and antiquark in pp collisions at $\sqrt{s} = 8$ TeV, *CMS Collaboration (Vardan Khachatryan et al.)*, Submitted to Phys. Lett. B., arXiv:1610.09551

Search for top quark decays via Higgs-boson-mediated flavor-changing neutral currents in pp collisions at $\sqrt{s} = 8$ TeV, *CMS Collaboration (Vardan Khachatryan et al.)*, Submitted to JHEP, arXiv:1610.04857

Measurement of differential cross sections for top quark pair production using the lepton+jets final state in proton-proton collisions at 13 TeV, *CMS Collaboration (Vardan Khachatryan et al.)*, Submitted to Phys. Rev. D, arXiv:1610.04191

Cross section measurement of t-channel single top quark production in pp collisions at $\sqrt{s} = 13$ TeV, *CMS Collaboration (Serguei Chatrchyan et al.)*, Submitted to Phys. Lett. B., arXiv:1610.00678

Other

Additional peer-reviewed publications of which I am also an author, in reverse chronological order:

Measurements of differential production cross sections for a Z boson in association with jets in pp collisions at $\sqrt{s} = 8$ TeV CMS Collaboration
arXiv:1611.03844 [hep-ex].

Search for dijet resonances in proton-proton collisions at $\sqrt{s} = 13$ TeV and constraints on dark matter and other models CMS Collaboration
arXiv:1611.03568 [hep-ex].

Charged-particle nuclear modification factors in PbPb and pPb collisions at $\sqrt{s[NN]} = 5.02$ TeV CMS Collaboration
arXiv:1611.01664 [hep-ex].

Suppression of Upsilon(1S), Upsilon(2S), and Upsilon(3S) quarkonium states in PbPb collisions at $\sqrt{s[NN]} = 2.76$ TeV CMS Collaboration
arXiv:1611.01510 [hep-ex].

Relative modification of prompt Psi(2S) and J/psi yields from pp to PbPb collisions at $\sqrt{s[NN]} = 5.02$ TeV CMS Collaboration
arXiv:1611.01438 [hep-ex].

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 α_T variable CMS Collaboration
arXiv:1611.00338 [hep-ex].

Searches for invisible decays of the Higgs boson in pp collisions at $\sqrt{s} = 7, 8$, and 13 TeV CMS Collaboration
arXiv:1610.09218 [hep-ex].

Search for heavy resonances decaying into a vector boson and a Higgs boson in final states with charged leptons, neutrinos, and b quarks CMS Collaboration
arXiv:1610.08066 [hep-ex].

Observation of Upsilon(1S) pair production in proton-proton collisions at $\sqrt{s} = 8$ TeV CMS Collaboration
arXiv:1610.07095 [hep-ex].

Search for R-parity violating supersymmetry with displaced vertices in proton-proton collisions at $\sqrt{s} = 8$ TeV CMS Collaboration
arXiv:1610.05133 [hep-ex].

Search for electroweak production of charginos in final states with two tau leptons in pp collisions at $\sqrt{s} = 8$ TeV CMS Collaboration
arXiv:1610.04870 [hep-ex].

Measurements of differential cross sections for associated production of a W boson and jets in proton-proton collisions at $\sqrt{s}=8$ TeV CMS Collaboration
arXiv:1610.04222 [hep-ex].

Search for high-mass Z-gamma resonances in $e+e$ -gamma and $\mu+\mu$ -gamma final states in proton-proton collisions at $\sqrt{s}=8$ and 13 TeV CMS Collaboration
arXiv:1610.02960 [hep-ex].

Suppression and azimuthal anisotropy of prompt and nonprompt J/psi production in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV CMS Collaboration
arXiv:1610.00613 [nucl-ex].

Observation of charge-dependent azimuthal correlations in pPb collisions and its implication for the search for the chiral magnetic effect CMS Collaboration
arXiv:1610.00263 [nucl-ex].

Search for supersymmetry in events with one lepton and multiple jets in proton-proton collisions at $\sqrt{s} = 13$ TeV CMS Collaboration
arXiv:1609.09386 [hep-ex].

Search for long-lived charged particles in proton-proton collisions at $\sqrt{s} = 13$ TeV CMS Collaboration
arXiv:1609.08382 [hep-ex].

Inclusive search for supersymmetry using razor variables in pp collisions at $\sqrt{s} = 13$ TeV CMS Collaboration
arXiv:1609.07658 [hep-ex].

Measurement of the WZ production cross section in pp collisions at $\sqrt{s} = 7$ and 8 TeV and search for anomalous triple gauge couplings at $\sqrt{s} = 8$ TeV CMS Collaboration
arXiv:1609.05721 [hep-ex].

Search for narrow resonances in dilepton mass spectra in proton-proton collisions at $\sqrt{s} = 13$ TeV and combination with 8 TeV data CMS Collaboration
arXiv:1609.05391 [hep-ex].

Measurement of inclusive jet cross-sections in pp and PbPb collisions at $\sqrt{s_{NN}}=2.76$ TeV CMS Collaboration
arXiv:1609.05383 [nucl-ex].

Measurement and QCD analysis of double-differential inclusive jet cross-sections in pp collisions at $\sqrt{s} = 8$ TeV and ratios to 2.76 and 7 TeV

CMS Collaboration
arXiv:1609.05331 [hep-ex].

Studies of inclusive four-jet production with two b-tagged jets in proton-proton collisions at 7 TeV

CMS Collaboration
arXiv:1609.03489 [hep-ex].

Search for high-mass diphoton resonances in proton-proton collisions at 13 TeV and combination with 8 TeV search

CMS Collaboration
arXiv:1609.02507 [hep-ex].

Decomposing transverse momentum balance contributions for quenched jets in PbPb collisions at $\sqrt{s[NN]} = 2.76$ TeV

CMS Collaboration
arXiv:1609.02466 [nucl-ex].

The CMS trigger system

CMS Collaboration
arXiv:1609.02366 [physics.ins-det].

Measurement of the total and differential inclusive B(+) hadron cross sections in pp collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration
arXiv:1609.00873 [hep-ex].

Measurement of the production cross section of the W boson in association with two b jets in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1608.07561 [hep-ex].

Measurement of the mass of the top quark in decays with a J/psi meson in pp collisions at 8 TeV

CMS Collaboration
arXiv:1608.03560 [hep-ex].

Search for new physics in events with high jet multiplicity and low missing transverse momentum in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1608.01224 [hep-ex].

Measurement of the ZZ production cross section and $Z \rightarrow \ell^+ \ell^- \ell'^+ \ell'^-$ branching fraction in pp collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration
arXiv:1607.08834 [hep-ex].

Measurement of electroweak production of a W boson and two forward jets in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1607.06975 [hep-ex].

Measurement of the WZ production cross section in pp collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration

arXiv:1607.06943 [hep-ex].

Search for dark matter in proton-proton collisions at 8 TeV with missing transverse momentum and vector boson tagged jets

CMS Collaboration

arXiv:1607.05764 [hep-ex].

Jet energy scale and resolution in the CMS experiment in pp collisions at 8 TeV

CMS Collaboration

arXiv:1607.03663 [hep-ex].

Search for lepton flavour violating decays of the Higgs boson to $e\tau$ and $e\mu$ in proton-proton collisions at $\sqrt{s}=8$ TeV

CMS Collaboration

arXiv:1607.03561 [hep-ex].

Observation of the decay $B^+ \rightarrow \psi(2S)\phi(1020)K^+$ in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1607.02638 [hep-ex].

Search for new physics in final states with two opposite-sign, same-flavor leptons, jets, and missing transverse momentum in pp collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration

arXiv:1607.00915 [hep-ex].

Measurement of the differential cross sections for top quark pair production as a function of kinematic event variables in pp collisions at $\sqrt{s} = 7$ and 8 TeV

CMS Collaboration

arXiv:1607.00837 [hep-ex].

Searches for R-parity-violating supersymmetry in pp collisions at $\sqrt{s}=8$ TeV in final states with 0-4 leptons

CMS Collaboration

arXiv:1606.08076 [hep-ex].

Evidence for collectivity in pp collisions at the LHC

CMS Collaboration

arXiv:1606.06198 [nucl-ex].

Measurement of the transverse momentum spectra of weak vector bosons produced in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1606.05864 [hep-ex].

Search for resonant production of high-mass photon pairs in proton-proton collisions at $\sqrt{s} = 8$ and 13 TeV

CMS Collaboration

arXiv:1606.04093 [hep-ex].

Phenomenological MSSM interpretation of CMS searches in pp collisions at $\sqrt{s} = 7$ and 8 TeV

CMS Collaboration

arXiv:1606.03577 [hep-ex].

Measurements of the Higgs boson production and decay rates and constraints on its couplings from a combined ATLAS and CMS analysis of the LHC pp collision data at $\sqrt{s} = 7$ and 8 TeV

By ATLAS and CMS Collaborations

arXiv:1606.02266 [hep-ex].

Search for dark matter and supersymmetry with a compressed mass spectrum in the vector boson fusion topology in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1605.09305 [hep-ex].

Search for top squark pair production in compressed-mass-spectrum scenarios in proton-proton collisions at $\sqrt{s} = 8$ TeV using the α_T variable

CMS Collaboration

arXiv:1605.08993 [hep-ex].

Coherent J/Psi photoproduction in ultra-peripheral PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV with the CMS experiment

CMS Collaboration

arXiv:1605.06966 [nucl-ex].

Multiplicity and rapidity dependence of strange hadron production in pp, pPb, and PbPb collisions at the LHC

CMS Collaboration

arXiv:1605.06699 [nucl-ex].

Search for supersymmetry in pp collisions at $\sqrt{s} = 13$ TeV in the single-lepton final state using the sum of masses of large-radius jets

CMS Collaboration

arXiv:1605.04608 [hep-ex].

Measurement of the double-differential inclusive jet cross section in proton-proton collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration

arXiv:1605.04436 [hep-ex].

Search for new physics in same-sign dilepton events in proton-proton collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration

arXiv:1605.03171 [hep-ex]

Measurement of the integrated and differential t-tbar production cross sections for high-pt top quarks in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1605.00116 [hep-ex].

Search for narrow resonances in dijet final states at $\sqrt{s}=8$ TeV with the novel CMS technique of data scouting

CMS Collaboration

arXiv:1604.08907 [hep-ex].

Pseudorapidity dependence of long-range two-particle correlations in pPb collisions at $\sqrt{s[NN]}=5.02$ TeV

CMS Collaboration

arXiv:1604.05347 [nucl-ex].

Search for lepton flavour violating decays of heavy resonances and quantum black holes to an e-mu pair in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1604.05239 [hep-ex].

Evidence for exclusive gamma-gamma to $W^+ W^-$ production and constraints on anomalous quartic gauge couplings at $\sqrt{s} = 7$ and 8 TeV

CMS Collaboration

arXiv:1604.04464 [hep-ex].

Search for dark matter particles in proton-proton collisions at $\sqrt{s} = 8$ TeV using the razor variables

CMS Collaboration

arXiv:1603.08914 [hep-ex].

Search for two Higgs bosons in final states containing two photons and two bottom quarks

CMS Collaboration

arXiv:1603.06896 [hep-ex].

Measurement of the top quark mass using charged particles in collisions at $\sqrt{s} =$

8 TeV

CMS Collaboration

arXiv:1603.06536 [hep-ex].

Measurements of $t\bar{t}$ charge asymmetry using dilepton final states in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1603.06221 [hep-ex].

Search for new physics with the MT_2 variable in all-jets final states produced in pp collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration

arXiv:1603.04053 [hep-ex].

Search for neutral resonances decaying into a Z boson and a pair of b jets or tau leptons

CMS Collaboration

arXiv:1603.02991 [hep-ex].

$Y(nS)$ Polarizations Versus Particle Multiplicity in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1603.02913 [hep-ex].

Measurement of the $t\bar{t}$ production cross section in the e-mu channel in proton-proton collisions at $\sqrt{s} = 7$ and 8 TeV

CMS Collaboration

arXiv:1603.02303 [hep-ex].

Search for heavy Majorana neutrinos in $e^{+/-} e^{+/-}$ plus jets and $e^{+/-} \mu^{+/-}$ plus jets events in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1603.02248 [hep-ex].

Measurement of the differential cross section and charge asymmetry for inclusive pp to $W + X$ production at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1603.01803 [hep-ex].

Search for direct pair production of supersymmetric top quarks decaying to all-hadronic final states in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1603.00765 [hep-ex].

Measurements of the $t\bar{t}$ production cross section in lepton+jets final states in pp collisions at 8 TeV and ratio of 8 to 7 TeV cross sections

CMS Collaboration

arXiv:1602.09024 [hep-ex].

Search for supersymmetry in electroweak production with photons and large missing transverse energy in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1602.08772 [hep-ex].

Search for heavy resonances decaying to two Higgs bosons in final states containing four b quarks

CMS Collaboration

arXiv:1602.08762 [hep-ex].

Measurement of the $Z\gamma \rightarrow \nu\bar{\nu}\gamma$ production cross section in pp collisions at $\sqrt{s} = 8$ TeV and limits on anomalous $ZZ\gamma$ and $Z\gamma\gamma$ trilinear gauge boson couplings

CMS Collaboration

arXiv:1602.07152 [hep-ex].

Search for supersymmetry in the multijet and missing transverse momentum final state in pp collisions at 13 TeV

CMS Collaboration

arXiv:1602.06581 [hep-ex].

Measurement of dijet azimuthal decorrelation in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1602.04384 [hep-ex].

Search for R-parity violating decays of a top squark in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1602.04334 [hep-ex].

Combined search for anomalous pseudoscalar HVV couplings in VH production and H to VV decay

CMS Collaboration

arXiv:1602.04305 [hep-ex].

Search for direct pair production of scalar top quarks in the single- and dilepton channels in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1602.03169 [hep-ex].

Search for supersymmetry in pp collisions at $\sqrt{s} = 8$ TeV in final states with boosted W bosons and b jets using razor variables

CMS Collaboration

arXiv:1602.02917 [hep-ex].

Azimuthal decorrelation of jets widely separated in rapidity in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1601.06713 [hep-ex].

Search for massive WH resonances decaying into the $\ell\nu b\bar{b}$ final state at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1601.06431 [hep-ex].

Forward-backward asymmetry of Drell-Yan lepton pairs in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1601.04768 [hep-ex].

Measurement of inclusive jet production and nuclear modifications in pPb collisions at $\sqrt{s[NN]} = 5.02$ TeV

CMS Collaboration

arXiv:1601.02001 [nucl-ex].

Measurements of t-tbar spin correlations and top quark polarization using dilepton final states in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1601.01107 [hep-ex].

Correlations between jets and charged particles in PbPb and pp collisions at $\sqrt{s[NN]} = 2.76$ TeV

CMS Collaboration

arXiv:1601.00079 [nucl-ex].

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

CMS Collaboration

arXiv:1512.08377 [hep-ex].

Search for supersymmetry in events with soft leptons, low jet multiplicity, and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1512.08002 [hep-ex].

Study of Z boson production in pPb collisions at $\sqrt{s[NN]} = 5.02$ TeV

CMS Collaboration

arXiv:1512.06461 [hep-ex].

Measurement of the inclusive jet cross section in pp collisions at $\sqrt{s} = 2.76$ TeV

CMS Collaboration

arXiv:1512.06212 [hep-ex].

Search for narrow resonances decaying to dijets in proton-proton collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration

arXiv:1512.01224 [hep-ex].

Event generator tunes obtained from underlying event and multiparton scattering measurements

CMS Collaboration

arXiv:1512.00815 [hep-ex].

Search for dark matter and unparticles produced in association with a Z boson in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1511.09375 [hep-ex].

Measurement of spin correlations in t - \bar{t} production using the matrix element method in the $\mu\text{on} + \text{jets}$ final state in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1511.06170 [hep-ex].

Search for a low-mass pseudoscalar Higgs boson produced in association with a b - \bar{b} pair in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1511.03610 [hep-ex].

Search for excited leptons in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1511.01407 [hep-ex].

Reconstruction and identification of τ lepton decays to hadrons and ν_τ at CMS

CMS Collaboration

arXiv:1510.07488 [physics.ins-det].

Search for a very light NMSSM Higgs boson produced in decays of the 125 GeV scalar boson and decaying into τ leptons in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1510.06534 [hep-ex].

Measurement of the top quark pair production cross section in proton-proton collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration

arXiv:1510.05302 [hep-ex].

Search for a light charged Higgs boson decaying to c s -bar in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1510.04252 [hep-ex].
10.1007/JHEP12(2015)178.
JHEP 1512 (2015) 178.

Transverse momentum spectra of b jets in pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV

CMS Collaboration
arXiv:1510.03373 [nucl-ex].

Measurement of $t\bar{t}$ production with additional jet activity, including b quark jets, in the dilepton decay channel using pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1510.03072 [hep-ex].

Measurement of long-range near-side two-particle angular correlations in pp collisions at $\sqrt{s} = 13$ TeV

CMS Collaboration
arXiv:1510.03068 [nucl-ex].

Searches for a heavy scalar boson H decaying to a pair of 125 GeV Higgs bosons hh or for a heavy pseudoscalar boson A decaying to Zh , in the final states with $h \rightarrow \tau\tau$

CMS Collaboration
arXiv:1510.01181 [hep-ex].

Observation of top quark pairs produced in association with a vector boson in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1510.01131 [hep-ex].

Measurement of transverse momentum relative to dijet systems in PbPb and pp collisions at $\sqrt{s_{NN}} = 2.76$ TeV

CMS Collaboration
arXiv:1509.09029 [nucl-ex].

Search for the Production of an Excited Bottom Quark Decaying to tW in Proton-Proton Collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1509.08141 [hep-ex].

Measurement of the $t\bar{t}b\bar{b}$ Production Cross Section in the All-Jets Final State in pp Collisions at $\sqrt{s}=8$ TeV

CMS Collaboration
arXiv:1509.06076 [hep-ex].

Search for $W' \rightarrow tb$ in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1509.06051 [hep-ex].

Search for Vector-Like Charge 2/3 T Quarks in Proton-Proton Collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1509.04177 [hep-ex].

Measurement of the top quark mass using proton-proton data at $\sqrt{s} = 7$ and 8 TeV

CMS Collaboration

arXiv:1509.04044 [hep-ex].

Measurement of the Inelastic Cross Section in Proton-Lead Collisions at $\sqrt{s_{NN}} = 5.02$ TeV

CMS Collaboration

arXiv:1509.03893 [hep-ex].

Search for Single Production of Scalar Leptoquarks in Proton-Proton Collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1509.03750 [hep-ex].

Search for Pair Production of First and Second Generation Leptoquarks in Proton-Proton Collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1509.03744 [hep-ex].

Measurement of Differential Cross Sections for Higgs Boson Production in the Diphoton Decay Channel in pp Collisions at $\sqrt{s}=8$ TeV

CMS Collaboration

arXiv:1508.07819 [hep-ex].

Search for a charged Higgs boson in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1508.07774 [hep-ex].

10.1007/JHEP11(2015)018.

JHEP 1511 (2015) 018.

Search for supersymmetry in the vector-boson fusion topology in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1508.07628 [hep-ex].

10.1007/JHEP11(2015)189.

JHEP 1511 (2015) 189.

Study of B Meson Production in pPb Collisions at $\sqrt{s_{NN}} = 5.02$ TeV

CMS Collaboration

arXiv:1508.06678 [nucl-ex].

Search for W' decaying to tau lepton and neutrino in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1508.04308 [hep-ex].

Search for neutral MSSM Higgs bosons decaying to $\mu^+\mu^-$ in pp collisions at $\sqrt{s} = 7$ and 8 TeV

CMS Collaboration

arXiv:1508.01437 [hep-ex].

10.1016/j.physletb.2015.11.042.

Phys.Lett. B752 (2016) 221-246.

Search for Supersymmetry with a Photon, a Lepton, and Missing Transverse Momentum in pp Collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1508.01218 [hep-ex].

Angular analysis of the decay $B^0 \rightarrow K^{*0}\mu^+\mu^-$ from pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1507.08126 [hep-ex].

10.1016/j.physletb.2015.12.020.

Phys.Lett. B753 (2016) 424-448.

Measurement of the CP-violating weak phase ϕ_s and the decay width difference $\Delta\Gamma_s$ using the $B_s^0 \rightarrow J/\psi\phi(1020)$ decay channel in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1507.07527 [hep-ex].

Measurement of the underlying event activity using charged-particle jets in proton-proton collisions at $\sqrt{s} = 2.76$ TeV

CMS Collaboration

arXiv:1507.07229 [hep-ex].

10.1007/JHEP09(2015)137.

JHEP 1509 (2015) 137.

Search for pair-produced vector-like B quarks in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1507.07129 [hep-ex].

Limits on the Higgs boson lifetime and width from its decay to four charged leptons

CMS Collaboration

arXiv:1507.06656 [hep-ex].

10.1103/PhysRevD.92.072010.

Phys.Rev. D92 (2015) 7, 072010.

Pseudorapidity distribution of charged hadrons in proton-proton collisions at $\sqrt{s} = 13$

TeV

CMS Collaboration

arXiv:1507.05915 [hep-ex].

10.1016/j.physletb.2015.10.004.

Phys.Lett. B751 (2015) 143-163.

Measurement of the W^+W^- cross section in pp collisions at $\sqrt{s} = 8$ TeV and limits on anomalous gauge couplings

CMS Collaboration

arXiv:1507.03268 [hep-ex].

Inclusive and differential measurements of the $t\bar{t}$ charge asymmetry in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1507.03119 [hep-ex].

Search for a Higgs boson decaying into $\gamma^*\gamma \rightarrow \ell\ell\gamma$ with low dilepton mass in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1507.03031 [hep-ex].

10.1016/j.physletb.2015.12.039.

Phys.Lett. B753 (2016) 341-362.

Search for supersymmetry with photons in pp collisions at $\sqrt{s}=8$ TeV

CMS Collaboration

arXiv:1507.02898 [hep-ex].

10.1103/PhysRevD.92.072006.

Phys.Rev. D92 (2015) 7, 072006.

Search for exotic decays of a Higgs boson into undetectable particles and one or more photons

CMS Collaboration

arXiv:1507.00359 [hep-ex].

10.1016/j.physletb.2015.12.017.

Phys.Lett. B753 (2016) 363-388.

Production of leading charged particles and leading charged-particle jets at small transverse momenta in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1507.00233 [hep-ex].

10.1103/PhysRevD.92.112001.

Phys.Rev. D92 (2015) 11, 112001.

Search for Neutral MSSM Higgs Bosons Decaying into A Pair of Bottom Quarks

CMS Collaboration

arXiv:1506.08329 [hep-ex].

10.1007/JHEP11(2015)071.

JHEP 1511 (2015) 071.

Search for Resonant $t\bar{t}$ Production in Proton-Proton Collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1506.03062 [hep-ex].

Search for diphoton resonances in the mass range from 150 to 850 GeV in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1506.02301 [hep-ex].

10.1016/j.physletb.2015.09.062.

Phys.Lett. B750 (2015) 494-519.

Search for A Massive Resonance Decaying into a Higgs Boson and a W or Z Boson in Hadronic Final States in Proton-Proton Collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1506.01443 [hep-ex].

Search for the standard model Higgs boson produced through vector boson fusion and decaying to $b\bar{b}$

CMS Collaboration

arXiv:1506.01010 [hep-ex].

10.1103/PhysRevD.92.032008.

Phys.Rev. D92 (2015) 3, 032008.

A search for pair production of new light bosons decaying into muons

CMS Collaboration

arXiv:1506.00424 [hep-ex].

10.1016/j.physletb.2015.10.067.

Phys.Lett. B752 (2016) 146-168.

Search for neutral color-octet weak-triplet scalar particles in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1505.08118 [hep-ex].

10.1007/JHEP09(2015)201.

JHEP 1509 (2015) 201.

Comparison of the $Z/\gamma^* + \text{jets}$ to $\gamma + \text{jets}$ cross sections in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1505.06520 [hep-ex].

10.1007/JHEP10(2015)128.

JHEP 1510 (2015) 128.

Measurement of the differential cross section for top quark pair production in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1505.04480 [hep-ex].
10.1140/epjc/s10052-015-3709-x.
Eur.Phys.J. C75 (2015) 11, 542.

Search for a pseudoscalar boson decaying into a Z boson and the 125 GeV Higgs boson in $l^+l^-b\bar{b}$ final states CMS Collaboration
arXiv:1504.04710 [hep-ex].
10.1016/j.physletb.2015.07.010.
Phys.Lett. B748 (2015) 221-243.

Angular coefficients of Z bosons produced in pp collisions at $\sqrt{s} = 8$ TeV and decaying to $\mu^+\mu^-$ as a function of transverse momentum and rapidity
CMS Collaboration
arXiv:1504.03512 [hep-ex].
10.1016/j.physletb.2015.08.061.
Phys.Lett. B750 (2015) 154-175.

Measurement of the Z boson differential cross section in transverse momentum and rapidity in proton proton collisions at 8 TeV
CMS Collaboration
arXiv:1504.03511 [hep-ex].
10.1016/j.physletb.2015.07.065.
Phys.Lett. B749 (2015) 187-209.

Search for the production of dark matter in association with top-quark pairs in the single-lepton final state in proton-proton collisions at $\sqrt{s} = 8$ TeV
CMS Collaboration
arXiv:1504.03198 [hep-ex].
10.1007/JHEP06(2015)121.
JHEP 1506 (2015) 121.

Search for a Higgs Boson in the Mass Range from 145 to 1000 GeV Decaying to a Pair of W or Z Bosons
CMS Collaboration
arXiv:1504.00936 [hep-ex].
10.1007/JHEP10(2015)144.
JHEP 1510 (2015) 144.

Search for Third-Generation Scalar Leptoquarks in the $t\tau$ Channel in Proton-Proton Collisions at $\sqrt{s} = 8$ TeV
CMS Collaboration
arXiv:1503.09049 [hep-ex].
10.1007/JHEP07(2015)042.
JHEP 1507 (2015) 042.

Measurement of diffraction dissociation cross sections in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1503.08689 [hep-ex].

10.1103/PhysRevD.92.012003.

Phys.Rev. D92 (2015) 1, 012003.

Searches for third-generation squark production in fully hadronic final states in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1503.08037 [hep-ex].

10.1007/JHEP06(2015)116.

JHEP 1506 (2015) 116.

Combined Measurement of the Higgs Boson Mass in pp Collisions at $\sqrt{s} = 7$ and 8 TeV with the ATLAS and CMS Experiments

ATLAS and CMS Collaborations

arXiv:1503.07589 [hep-ex].

10.1103/PhysRevLett.114.191803.

Phys.Rev.Lett. 114 (2015) 191803.

Study of W boson production in pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV

CMS Collaboration

arXiv:1503.05825 [nucl-ex].

10.1016/j.physletb.2015.09.057.

Phys.Lett. B750 (2015) 565-586.

Measurements of the $Z Z$ production cross sections in the $2l2\nu$ channel in proton-proton collisions at $\sqrt{s} = 7$ and 8 TeV and combined constraints on triple gauge couplings

CMS Collaboration

arXiv:1503.05467 [hep-ex].

10.1140/epjc/s10052-015-3706-0.

Eur.Phys.J. C75 (2015) 10, 511.

Search for resonant pair production of Higgs bosons decaying to two bottom quark-antiquark pairs in proton-proton collisions at 8 TeV

CMS Collaboration

arXiv:1503.04114 [hep-ex].

10.1016/j.physletb.2015.08.047.

Phys.Lett. B749 (2015) 560-582.

Search for vector-like T quarks decaying to top quarks and Higgs bosons in the all-hadronic channel using jet substructure

CMS Collaboration

arXiv:1503.01952 [hep-ex].

10.1007/JHEP06(2015)080.

JHEP 1506 (2015) 080.

Evidence for transverse momentum and pseudorapidity dependent event plane fluctuations in PbPb and pPb collisions

CMS Collaboration

arXiv:1503.01692 [nucl-ex].

10.1103/PhysRevC.92.034911.

Phys.Rev. C92 (2015) 3, 034911.124.

Study of Final-State Radiation in Decays of Z Bosons Produced in pp Collisions at 7 TeV

CMS Collaboration

arXiv:1502.07940 [hep-ex].

10.1103/PhysRevD.91.092012.

Phys.Rev. D91 (2015) 9, 092012.124.

Search for Lepton-Flavour-Violating Decays of the Higgs Boson

CMS Collaboration

arXiv:1502.07400 [hep-ex].

10.1016/j.physletb.2015.07.053.

Phys.Lett. B749 (2015) 337-362.124.

Search for Physics Beyond the Standard Model in Events with Two Leptons, Jets, and Missing Transverse Momentum in pp Collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1502.06031 [hep-ex].

10.1007/JHEP04(2015)124.

JHEP 1504 (2015) 124.

Measurement of the $Z\gamma$ Production Cross Section in pp Collisions at 8 TeV and Search for Anomalous Triple Gauge Boson Couplings

CMS Collaboration

arXiv:1502.05664 [hep-ex].

10.1007/JHEP04(2015)164.

JHEP 1504 (2015) 164.

Nuclear Effects on the Transverse Momentum Spectra of Charged Particles in pPb Collisions at $\sqrt{s_{NN}} = 5.02$ TeV

CMS Collaboration

arXiv:1502.05387 [nucl-ex].

10.1140/epjc/s10052-015-3435-4.

Eur.Phys.J. C75 (2015) 5, 237.

Evidence for Collective Multiparticle Correlations in p-Pb Collisions

CMS Collaboration

arXiv:1502.05382 [nucl-ex].

10.1103/PhysRevLett.115.012301.

Phys.Rev.Lett. 115 (2015) 1, 012301.

Search for Narrow High-Mass Resonances in Proton-Proton Collisions at $\sqrt{s} = 8$ TeV Decaying to a Z and a Higgs Boson

CMS Collaboration

arXiv:1502.04994 [hep-ex].

10.1016/j.physletb.2015.07.011.

Phys.Lett. B748 (2015) 255-277.

Distributions of Topological Observables in Inclusive Three- and Four-Jet Events in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1502.04785 [hep-ex].

10.1140/epjc/s10052-015-3491-9.

Eur.Phys.J. C75 (2015) 7, 302.

Searches for Supersymmetry using the M_{T2} Variable in Hadronic Events Produced in pp Collisions at 8 TeV

CMS Collaboration

arXiv:1502.04358 [hep-ex].

10.1007/JHEP05(2015)078.

JHEP 1505 (2015) 078.

Measurement of J/ψ and $\psi(2S)$ Prompt Double-Differential Cross Sections in pp Collisions at $\sqrt{s}=7\text{TeV}$

CMS Collaboration

arXiv:1502.04155 [hep-ex]. 10.1103/PhysRevLett.114.191802. Phys.Rev.Lett. 114 (2015) 19, 191802.

Performance of Photon Reconstruction and Identification with the CMS Detector in Proton-Proton Collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1502.02702 [physics.ins-det].

10.1088/1748-0221/10/08/P08010.

JINST 10 (2015) 08, P08010.

Performance of Electron Reconstruction and Selection with the CMS Detector in Proton-Proton Collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1502.02701 [physics.ins-det].

10.1088/1748-0221/10/06/P06005.

JINST 10 (2015) 06, P06005.

Constraints on the pMSSM, AMSB Model and on Other Models from the Search for Long-Lived Charged Particles in Proton-Proton Collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1502.02522 [hep-ex].
10.1140/epjc/s10052-015-3533-3.
Eur.Phys.J. C75 (2015) 7, 325.

Search for Supersymmetry Using Razor Variables in Events with b -Tagged Jets in pp Collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1502.00300 [hep-ex].
10.1103/PhysRevD.91.052018.
Phys.Rev. D91 (2015) 052018.

Measurements of the $\Upsilon(1S)$, $\Upsilon(2S)$, and $\Upsilon(3S)$ differential cross sections in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1501.07750 [hep-ex].
10.1016/j.physletb.2015.07.037.
Phys.Lett. B749 (2015) 14-34.

Measurement of the ratio $\mathcal{B}(B_s^0 \rightarrow J/\psi f_0(980))/\mathcal{B}(B_s^0 \rightarrow J/\psi \phi(1020))$ in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1501.06089 [hep-ex].

Search for Decays of Stopped Long-Lived Particles Produced in Proton-Proton Collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1501.05603 [hep-ex].
10.1140/epjc/s10052-015-3367-z.
Eur.Phys.J. C75 (2015) 4, 151.

Search for heavy Majorana neutrinos in $\mu^\pm \mu^\pm +$ jets events in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1501.05566 [hep-ex].
10.1016/j.physletb.2015.06.070.
Phys.Lett. B748 (2015) 144-166.

Search for resonances and quantum black holes using dijet mass spectra in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1501.04198 [hep-ex].
10.1103/PhysRevD.91.052009.
Phys.Rev. D91 (2015) 5, 052009.

Search for pair-produced resonances decaying to jet pairs in proton-proton collisions at $\sqrt{s}=8$ TeV

CMS Collaboration
arXiv:1412.7706 [hep-ex].
10.1016/j.physletb.2015.04.045.
Phys.Lett. B747 (2015) 98-119.

Search for physics beyond the standard model in dilepton mass spectra in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1412.6302 [hep-ex].
10.1007/JHEP04(2015)025.
JHEP 1504 (2015) 025.

Searches for supersymmetry based on events with b jets and four W bosons in pp collisions at 8 TeV

CMS Collaboration
arXiv:1412.4109 [hep-ex].
10.1016/j.physletb.2015.04.002.
Phys.Lett. B745 (2015) 5-28.

Measurement of the inclusive 3-jet production differential cross section in proton-proton collisions at 7 TeV and determination of the strong coupling constant in the TeV range

CMS Collaboration
arXiv:1412.1633 [hep-ex].
10.1140/epjc/s10052-015-3376-y.
Eur.Phys.J. C75 (2015) 5, 186.

Measurements of differential and double-differential Drell-Yan cross sections in proton-proton collisions at 8 TeV

CMS Collaboration
arXiv:1412.1115 [hep-ex].
10.1140/epjc/s10052-015-3364-2.
Eur.Phys.J. C75 (2015) 4, 147.

Search for stealth supersymmetry in events with jets, either photons or leptons, and low missing transverse momentum in pp collisions at 8 TeV

CMS Collaboration
arXiv:1411.7255 [hep-ex].
10.1016/j.physletb.2015.03.017.
Phys.Lett. B743 (2015) 503-525.

Search for long-lived particles that decay into final states containing two electrons or two muons in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1411.6977 [hep-ex].
10.1103/PhysRevD.91.052012.
Phys.Rev. D91 (2015) 5, 052012.

Search for Long-Lived Neutral Particles Decaying to Quark-Antiquark Pairs in Proton-Proton Collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1411.6530 [hep-ex].

10.1103/PhysRevD.91.012007.

Phys.Rev. D91 (2015) 1, 012007.

Search for disappearing tracks in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1411.6006 [hep-ex].

10.1007/JHEP01(2015)096.

JHEP 1501 (2015) 096.

Measurement of the cross section ratio $\sigma_{t\bar{t}b\bar{b}}/\sigma_{t\bar{t}jj}$ in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1411.5621 [hep-ex].

10.1016/j.physletb.2015.04.060.

Phys.Lett. B746 (2015) 132-153.

Observation of the rare $B_s^0 \rightarrow \mu^+ \mu^-$ decay from the combined analysis of CMS and LHCb data

CMS and LHCb Collaborations

arXiv:1411.4413 [hep-ex].

10.1038/nature14474.

Nature 522 (2015) 68-72.

Search for quark contact interactions and extra spatial dimensions using dijet angular distributions in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1411.2646 [hep-ex].

10.1016/j.physletb.2015.04.042.

Phys.Lett. B746 (2015) 79-99.

Performance of the CMS missing transverse momentum reconstruction in pp data at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1411.0511 [physics.ins-det].

10.1088/1748-0221/10/02/P02006.

JINST 10 (2015) 02, P02006.

Search for new phenomena in monophoton final states in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1410.8812 [hep-ex].

Constraints on parton distribution functions and extraction of the strong coupling constant from the inclusive jet cross section in pp collisions at $\sqrt{s} = 7\text{TeV}$

CMS Collaboration

arXiv:1410.6765 [hep-ex].

10.1140/epjc/s10052-015-3499-1.

Eur.Phys.J. C75 (2015) 6, 288.

Search for a standard model-like Higgs boson in the $\mu^+\mu^-$ and e^+e^- decay channels at the LHC

CMS Collaboration

arXiv:1410.6679 [hep-ex].

10.1016/j.physletb.2015.03.048.

Phys.Lett. B744 (2015) 184-207.

Study of vector boson scattering and search for new physics in events with two same-sign leptons and two jets

CMS Collaboration

arXiv:1410.6315 [hep-ex].

10.1103/PhysRevLett.114.051801.

Phys.Rev.Lett. 114 (2015) 5, 051801.

Measurement of the ratio of the production cross sections times branching fractions of $B_c^\pm \rightarrow J/\psi\pi^\pm$ and $B^\pm \rightarrow J/\psi K^\pm$ and $\mathcal{B}(B_c^\pm \rightarrow J/\psi\pi^\pm\pi^\pm\pi^\mp)/\mathcal{B}(B_c^\pm \rightarrow J/\psi\pi^\pm)$ in pp collisions at $\sqrt{s} = 7\text{ TeV}$

CMS Collaboration

arXiv:1410.5729 [hep-ex].

10.1007/JHEP01(2015)063. JHEP 1501 (2015) 063.

Study of Z production in PbPb and pp collisions at $\sqrt{s_{\text{NN}}} = 2.76\text{ TeV}$ in the dimuon and dielectron decay channels

CMS Collaboration

arXiv:1410.4825 [nucl-ex].

10.1007/JHEP03(2015)022.

JHEP 1503 (2015) 022..

Identification techniques for highly boosted W bosons that decay into hadrons

CMS Collaboration

arXiv:1410.4227 [hep-ex].

10.1007/JHEP12(2014)017.

JHEP 1412 (2014) 017..

Measurement of electroweak production of two jets in association with a Z boson in proton-proton collisions at $\sqrt{s} = 8\text{ TeV}$

CMS Collaboration

arXiv:1410.3153 [hep-ex].

10.1140/epjc/s10052-014-3232-5.

Eur.Phys.J. C75 (2015) 2, 66..

Searches for heavy Higgs bosons in two-Higgs-doublet models and for $t - ch$ decay using multilepton and diphoton final states in pp collisions at 8 TeV

CMS Collaboration

arXiv:1410.2751 [hep-ex].

10.1103/PhysRevD.90.112013.

Phys.Rev. D90 (2014) 112013..

Measurement of Prompt $\psi(2S) \rightarrow J/\psi$ Yield Ratios in Pb-Pb and $p - p$ Collisions at $\sqrt{s_{NN}} = 2.76$ TeV

CMS Collaboration

arXiv:1410.1804 [nucl-ex].

10.1103/PhysRevLett.113.262301.

Phys.Rev.Lett. 113 (2014) 26, 262301.

Search for Standard Model Production of Four Top Quarks in the Lepton + Jets Channel in pp Collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1409.7339 [hep-ex].

10.1007/JHEP11(2014)154.

JHEP 1411 (2014) 154.

Measurement of the production cross section ratio $\sigma(\text{chi}[b2](1P)) / \sigma(\text{chi}[b1](1P))$ in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1409.5761 [hep-ex].

10.1016/j.physletb.2015.02.048.

Phys.Lett. B743 (2015) 383-402.

Search for Displaced Supersymmetry in events with an electron and a muon with large impact parameters

CMS Collaboration

arXiv:1409.4789 [hep-ex].

10.1103/PhysRevLett.114.061801.

Phys.Rev.Lett. 114 (2015) 6, 061801.

Long-range two-particle correlations of strange hadrons with charged particles in pPb and PbPb collisions at LHC energies

CMS Collaboration

arXiv:1409.3392 [nucl-ex].

10.1016/j.physletb.2015.01.034.

Phys.Lett. B742 (2015) 200-224.

Searches for electroweak neutralino and chargino production in channels with Higgs, Z, and W bosons in pp collisions at 8 TeV

CMS Collaboration
arXiv:1409.3168 [hep-ex].
10.1103/PhysRevD.90.092007.
Phys.Rev. D90 (2014) 9, 092007.

Search for dark matter, extra dimensions, and unparticles in monojet events in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1408.3583 [hep-ex].
10.1140/epjc/s10052-015-3451-4.
Eur.Phys.J. C75 (2015) 5, 235.

Search for neutral MSSM Higgs bosons decaying to a pair of tau leptons in pp collisions

CMS Collaboration
arXiv:1408.3316 [hep-ex].
10.1007/JHEP10(2014)160.
JHEP 1410 (2014) 160.

Measurements of jet multiplicity and differential production cross sections of $Z +$ jets events in proton-proton collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1408.3104 [hep-ex].
10.1103/PhysRevD.91.052008.
Phys.Rev. D91 (2015) 5, 052008.

Search for physics beyond the standard model in final states with a lepton and missing transverse energy in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1408.2745 [hep-ex].
10.1103/PhysRevD.91.092005.
Phys.Rev. D91 (2015) 9, 092005.

Search for the associated production of the Higgs boson with a top-quark pair

CMS Collaboration
arXiv:1408.1682 [hep-ex].
10.1007/JHEP10(2014)106, 10.1007/JHEP09(2014)087.
JHEP 1409 (2014) 087, Erratum-ibid. 1410 (2014) 106.

Search for pair production of third-generation scalar leptoquarks and top squarks in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1408.0806 [hep-ex].
10.1016/j.physletb.2014.10.063.
Phys.Lett. B739 (2014) 229.

Measurement of the $t\bar{t}$ production cross section in pp collisions at $\sqrt{s} = 8$ TeV in dilepton final states containing one τ lepton

CMS Collaboration

arXiv:1407.6643 [hep-ex].

10.1016/j.physletb.2014.10.032.

Phys.Lett. B739 (2014) 23-43.

Search for heavy neutrinos and W bosons with right-handed couplings in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1407.3683 [hep-ex].

10.1140/epjc/s10052-014-3149-z.

Eur.Phys.J. C74 (2014) 11, 3149.

Search for new resonances decaying via WZ to leptons in proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1407.3476 [hep-ex].

10.1016/j.physletb.2014.11.026.

Phys.Lett. B740 (2014) 83-104.

Study of hadronic event-shape variables in multijet final states in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1407.2856 [hep-ex].

10.1007/JHEP10(2014)087.

JHEP 1410 (2014) 87.

Observation of the diphoton decay of the Higgs boson and measurement of its properties

CMS Collaboration

arXiv:1407.0558 [hep-ex].

10.1140/epjc/s10052-014-3076-z.

Eur.Phys.J. C74 (2014) 10, 3076.

Measurement of top quark-antiquark pair production in association with a W or Z boson in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1406.7830 [hep-ex].

10.1140/epjc/s10052-014-3060-7.

Eur.Phys.J. C74 (2014) 9, 3060.

Differential cross section measurements for the production of a W boson in association with jets in proton-proton collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1406.7533 [hep-ex].

10.1016/j.physletb.2014.12.003.
Phys.Lett. B741 (2015) 12.

Search for excited quarks in the γ +jet final state in proton proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1406.5171 [hep-ex].
10.1016/j.physletb.2014.09.048.
Phys.Lett. B738 (2014) 274-293.

Measurement of jet fragmentation in PbPb and pp collisions at $\sqrt{s_{NN}} = 2.76$ TeV

CMS Collaboration
arXiv:1406.0932 [nucl-ex].
10.1103/PhysRevC.90.024908.
Phys.Rev. C90 (2014) 2, 024908.

Measurement of prompt J/ψ pair production in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1406.0484 [hep-ex].
10.1007/JHEP09(2014)094.
JHEP 1409 (2014) 094.

Measurement of the ratio of inclusive jet cross sections using the anti- k_T algorithm with radius parameters $R=0.5$ and 0.7 in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1406.0324 [hep-ex].
10.1103/PhysRevD.90.072006.
Phys.Rev. D90 (2014) 7, 072006.

Measurement of the pp to ZZ production cross section and constraints on anomalous triple gauge couplings in four-lepton final states at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1406.0113 [hep-ex].
10.1016/j.physletb.2014.11.059.
Phys.Lett. B740 (2015) 250.

Search for jet extinction in the inclusive jet- p_t spectrum from proton-proton collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1405.7653 [hep-ex].
10.1103/PhysRevD.90.032005.
Phys.Rev. D90 (2014) 3, 032005.

Measurement of differential cross sections for the production of a pair of isolated photons in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1405.7225 [hep-ex].

10.1140/epjc/s10052-014-3129-3.
Eur.Phys.J. C74 (2014) 11, 3129.

Description and performance of track and primary-vertex reconstruction with the CMS tracker

CMS Collaboration
arXiv:1405.6569 [physics.ins-det].
10.1088/1748-0221/9/10/P10009.
JINST 9 (2014) 10, P10009.

Search for supersymmetry with razor variables in pp collisions at $\sqrt{s}=7$ TeV

CMS Collaboration
arXiv:1405.3961 [hep-ex].
10.1103/PhysRevD.90.112001.
Phys.Rev. D90 (2014) 11, 112001.

Search for top-squark pairs decaying into Higgs or Z bosons in pp collisions at $\sqrt{s}=8$ TeV

CMS Collaboration
arXiv:1405.3886 [hep-ex].
10.1016/j.physletb.2014.07.053.
Phys.Lett. B736 (2014) 371-397.

Constraints on the Higgs boson width from off-shell production and decay to Z-boson pairs

CMS Collaboration
arXiv:1405.3455 [hep-ex].
10.1016/j.physletb.2014.06.077.
Phys.Lett. B736 (2014) 64.

Search for massive resonances decaying into pairs of boosted bosons in semi-leptonic final states at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1405.3447 [hep-ex].
10.1007/JHEP08(2014)174.
JHEP 1408 (2014) 174.

Search for massive resonances in dijet systems containing jets tagged as W or Z boson decays in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1405.1994 [hep-ex].
10.1007/JHEP08(2014)173.
JHEP 1408 (2014) 173.

Measurement of pseudorapidity distributions of charged particles in proton-proton collisions at $\sqrt{s} = 8$ TeV by the CMS and TOTEM experiments

CMS and TOTEM Collaborations
arXiv:1405.0722 [hep-ex].
10.1140/epjc/s10052-014-3053-6.
Eur.Phys.J. C74 (2014) 10, 3053.

Search for anomalous production of events with three or more leptons in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1404.5801 [hep-ex].
10.1103/PhysRevD.90.032006.
Phys.Rev. D90 (2014) 3, 032006.

Search for $WW\gamma$ and $WZ\gamma$ production and constraints on anomalous quartic gauge couplings in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1404.4619 [hep-ex].
10.1103/PhysRevD.90.032008.
Phys.Rev. D90 (2014) 3, 032008.

Measurement of jet multiplicity distributions in $t\bar{t}$ production in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1404.3171 [hep-ex].
10.1140/epjc/s10052-014-3014-0.
Eur.Phys.J. C74 (2014) 8, 3014.

Measurement of the ratio $B(t \rightarrow Wb)/B(t \rightarrow Wq)$ in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1404.2292 [hep-ex].
10.1016/j.physletb.2014.06.076.
Phys.Lett. B736 (2014) 33.

Search for invisible decays of Higgs bosons in the vector boson fusion and associated ZH production modes

CMS Collaboration
arXiv:1404.1344 [hep-ex].
10.1140/epjc/s10052-014-2980-6.
Eur.Phys.J. C74 (2014) 8, 2980.

Measurement of WZ and ZZ production in pp collisions at $\sqrt{s} = 8$ TeV in final states with b -tagged jets

CMS Collaboration
arXiv:1403.3047 [hep-ex].
10.1140/epjc/s10052-014-2973-5.
Eur.Phys.J. C74 (2014) 8, 2973.

Alignment of the CMS tracker with LHC and cosmic ray data

CMS Collaboration

arXiv:1403.2286 [physics.ins-det].

10.1088/1748-0221/9/06/P06009.

JINST 9 (2014) P06009.

Search for new physics in the multijet and missing transverse momentum final state in proton-proton collisions at $\sqrt{s}=8$ TeV

CMS Collaboration

arXiv:1402.4770 [hep-ex].

10.1007/JHEP06(2014)055.

JHEP 1406 (2014) 055.

Measurements of the $t\bar{t}$ charge asymmetry using the dilepton decay channel in pp collisions at $\sqrt{s}=7$ TeV

CMS Collaboration

arXiv:1402.3803 [hep-ex].

10.1007/JHEP04(2014)191.

JHEP 1404 (2014) 191.

Search for $W' \rightarrow t\bar{b}$ decays in the lepton + jets final state in pp collisions at $\sqrt{s}=8$ TeV

CMS Collaboration

arXiv:1402.2176 [hep-ex].

10.1007/JHEP05(2014)108.

JHEP 1405 (2014) 108.

Measurement of the production cross sections for a Z boson and one or more b jets in pp collisions at $\sqrt{s}=7$ TeV

CMS Collaboration

arXiv:1402.1521 [hep-ex].

10.1007/JHEP06(2014)120.

JHEP 1406 (2014) 120.

Measurement of inclusive W and Z boson production cross sections in pp collisions at $\sqrt{s}=8$ TeV

CMS Collaboration

arXiv:1402.0923 [hep-ex].

10.1103/PhysRevLett.112.191802.

Phys.Rev.Lett. 112 (2014) 191802.

Evidence for the direct decay of the 125 GeV Higgs boson to fermions

CMS Collaboration

arXiv:1401.6527 [hep-ex].

10.1038/nphys3005.

Nature Phys. 10 (2014) 557-560.

Evidence for the 125 GeV Higgs boson decaying to a pair of τ leptons

CMS Collaboration

arXiv:1401.5041 [hep-ex].

10.1007/JHEP05(2014)104.

JHEP 1405 (2014) 104.

Studies of dijet transverse momentum balance and pseudorapidity distributions in pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV

CMS Collaboration

arXiv:1401.4433 [nucl-ex].

10.1140/epjc/s10052-014-2951-y.

Eur.Phys.J. C74 (2014) 7, 2951.

Measurement of the $t\bar{t}$ production cross section in the dilepton channel in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1312.7582 [hep-ex], arXiv:1312.7582.

10.1007/JHEP02(2014)024, 10.1007/JHEP02(2014)102.

JHEP 1402 (2014) 024, Erratum-ibid. 1402 (2014) 102.

Measurement of the production cross section for a W boson and two b jets in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1312.6608 [hep-ex].

10.1016/j.physletb.2014.06.041.

Phys.Lett. B735 (2014) 204.

Measurement of four-jet production in proton-proton collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1312.6440 [hep-ex].

10.1103/PhysRevD.89.092010.

Phys.Rev. D89 (2014) 9, 092010.

Event activity dependence of Y(nS) production in $\sqrt{s_{NN}}=5.02$ TeV pPb and $\sqrt{s}=2.76$ TeV pp collisions

CMS Collaboration

arXiv:1312.6300 [nucl-ex].

10.1007/JHEP04(2014)103.

JHEP 1404 (2014) 103.

Measurement of the muon charge asymmetry in inclusive $pp \rightarrow W + X$ production at $\sqrt{s} = 7$ TeV and an improved determination of light parton distribution functions

CMS Collaboration

arXiv:1312.6283 [hep-ex].

10.1103/PhysRevD.90.032004.

Phys.Rev. D90 (2014) 3, 032004.

Study of double parton scattering using $W + 2$ -jet events in proton-proton collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1312.5729 [hep-ex].

10.1007/JHEP03(2014)032.

JHEP 1403 (2014) 032.

Measurement of the properties of a Higgs boson in the four-lepton final state

CMS Collaboration

arXiv:1312.5353 [hep-ex].

10.1103/PhysRevD.89.092007.

Phys.Rev. D89 (2014) 092007.

Evidence of b-Jet Quenching in PbPb Collisions at $\sqrt{s_{NN}} = 2.76$ TeV

CMS Collaboration

arXiv:1312.4198 [nucl-ex].

10.1103/PhysRevLett.113.132301.

Phys.Rev.Lett. 113 (2014) 13, 132301.

Search for Flavor-Changing Neutral Currents in Top-Quark Decays $t \rightarrow Zq$ in pp Collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1312.4194 [hep-ex].

10.1103/PhysRevLett.112.171802.

Phys.Rev.Lett. 112 (2014) 17, 171802.

Search for top squark and higgsino production using diphoton Higgs boson decays

CMS Collaboration

arXiv:1312.3310 [hep-ex].

10.1103/PhysRevLett.112.161802.

Phys.Rev.Lett. 112 (2014) 161802.

Search for top-quark partners with charge 5/3 in the same-sign dilepton final state

CMS Collaboration

arXiv:1312.2391 [hep-ex].

10.1103/PhysRevLett.112.171801.

Phys.Rev.Lett. 112 (2014) 171801.

Studies of azimuthal dihadron correlations in ultra-central PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV

CMS Collaboration

arXiv:1312.1845 [nucl-ex].

10.1007/JHEP02(2014)088.

JHEP 1402 (2014) 088.

Inclusive search for a vector-like T quark with charge $\frac{2}{3}$ in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1311.7667 [hep-ex].

10.1016/j.physletb.2014.01.006.

Phys.Lett. B729 (2014) 149-171.

Search for new physics in events with same-sign dileptons and jets in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1311.6736, arXiv:1311.6736 [hep-ex].

10.1007/JHEP01(2014)163.

JHEP 1401 (2014) 163.

Measurement of the triple-differential cross section for photon+jets production in proton-proton collisions at $\sqrt{s}=7$ TeV

CMS Collaboration

arXiv:1311.6141 [hep-ex].

10.1007/JHEP06(2014)009.

JHEP 1406 (2014) 009.

Probing color coherence effects in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1311.5815 [hep-ex].

10.1140/epjc/s10052-014-2901-8.

Eur.Phys.J. C74 (2014) 6, 2901.

Search for pair production of excited top quarks in the lepton + jets final state

CMS Collaboration

arXiv:1311.5357 [hep-ex].

10.1007/JHEP06(2014)125.

JHEP 1406 (2014) 125.

Search for supersymmetry in pp collisions at $\sqrt{s}=8$ TeV in events with a single lepton, large jet multiplicity, and multiple b jets

CMS Collaboration

arXiv:1311.4937 [hep-ex].

10.1016/j.physletb.2014.04.023.

Phys.Lett. B733 (2014) 328-353.

Measurements of $t\bar{t}$ spin correlations and top-quark polarization using dilepton final states in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1311.3924 [hep-ex].

10.1103/PhysRevLett.112.182001.

Phys.Rev.Lett. 112 (2014) 182001.

Searches for light and heavy-flavour three-jet resonances in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1311.1799 [hep-ex].

10.1016/j.physletb.2014.01.049.

Phys.Lett. B730 (2014) 193-214.

Measurement of higher-order harmonic azimuthal anisotropy in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV

CMS Collaboration

arXiv:1310.8651 [nucl-ex].

10.1103/PhysRevC.89.044906.

Phys.Rev. C89 (2014) 044906.

Measurement of the differential and double-differential Drell-Yan cross sections in proton-proton collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1310.7291 [hep-ex].

10.1007/JHEP12(2013)030.

JHEP 1312 (2013) 030.

Jet and underlying event properties as a function of charged-particle multiplicity in proton-proton collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1310.4554 [hep-ex].

10.1140/epjc/s10052-013-2674-5.

Eur.Phys.J. C73 (2013) 12, 2674.

Search for the standard model Higgs boson produced in association with a W or a Z boson and decaying to bottom quarks

CMS Collaboration

arXiv:1310.3687 [hep-ex].

10.1103/PhysRevD.89.012003.

Phys.Rev. D89 (2014) 1, 012003.

Rapidity distributions in exclusive Z + jet and γ + jet events in pp collisions at $\sqrt{s}=7$ TeV

CMS Collaboration

arXiv:1310.3082 [hep-ex].

10.1103/PhysRevD.88.112009.

Phys.Rev. D88 (2013) 112009.

Search for baryon number violation in top-quark decays

CMS Collaboration

arXiv:1310.1618 [hep-ex].

10.1016/j.physletb.2014.02.033.

Phys.Lett. B731 (2014) 173-196.

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

CMS Collaboration

arXiv:1310.1349 [hep-ex].

10.1007/JHEP12(2013)039.

JHEP 1312 (2013) 039.

Measurement of associated W + charm production in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1310.1138 [hep-ex].

10.1007/JHEP02(2014)013.

JHEP 1402 (2014) 013.

Modification of jet shapes in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV

CMS Collaboration

arXiv:1310.0878 [nucl-ex].

10.1016/j.physletb.2014.01.042.

Phys.Lett. B730 (2014) 243-263.

Observation of a peaking structure in the J/psi phi mass spectrum from B(+/-) to J/psi phi K(+/-) decays

CMS Collaboration

arXiv:1309.6920 [hep-ex].

10.1016/j.physletb.2014.05.055.

Phys.Lett. B734 (2014) 261.

Searches for new physics using the $t\bar{t}$ invariant mass distribution in pp collisions at $\sqrt{s}=8$ TeV

CMS Collaboration

arXiv:1309.2030 [hep-ex].

10.1103/PhysRevLett.112.119903, 10.1103/PhysRevLett.111.211804.

Phys.Rev.Lett. 111 (2013) 21, 211804, Erratum-ibid. 112 (2014) 11, 119903.

Measurement of the production cross section for $Z\gamma \rightarrow \nu\bar{\nu}\gamma$ in pp collisions at $\sqrt{s} = 7$ TeV and limits on $ZZ\gamma$ and $Z\gamma\gamma$ triple gauge boson couplings

CMS Collaboration

arXiv:1309.1117 [hep-ex].

10.1007/JHEP10(2013)164.

JHEP 1310 (2013) 164.

Search for a new bottomonium state decaying to $\Upsilon(1S)\pi^+\pi^-$ in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1309.0250 [hep-ex].

10.1016/j.physletb.2013.10.016.
Phys.Lett. B727 (2013) 57-76.

Measurement of the W gamma and Z gamma inclusive cross sections in pp collisions at $\sqrt{s} = 7$ TeV and limits on anomalous triple gauge boson couplings

CMS Collaboration
arXiv:1308.6832 [hep-ex].
10.1103/PhysRevD.89.092005.
Phys.Rev. D89 (2014) 092005.

Measurement of the W-boson helicity in top-quark decays from $t\bar{t}$ production in lepton+jets events in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1308.3879 [hep-ex].
10.1007/JHEP10(2013)167.
JHEP 1310 (2013) 167.

Angular analysis and branching fraction measurement of the decay $B^0 \rightarrow K^{*0} \mu^+ \mu^-$

CMS Collaboration
arXiv:1308.3409 [hep-ex].
10.1016/j.physletb.2013.10.017.
Phys.Lett. B727 (2013) 77-100.

Search for top-squark pair production in the single-lepton final state in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1308.1586 [hep-ex].
10.1140/epjc/s10052-013-2677-2.
Eur.Phys.J. C73 (2013) 12, 2677.

Measurement of the prompt J/ψ and $\psi(2S)$ polarizations in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1307.6070 [hep-ex].
10.1016/j.physletb.2013.10.055.
Phys.Lett. B727 (2013) 381-402.

Search for a Higgs boson decaying into a Z and a photon in pp collisions at $\sqrt{s} = 7$ and 8 TeV

CMS Collaboration
arXiv:1307.5515 [hep-ex].
10.1016/j.physletb.2013.09.057.
Phys.Lett. B726 (2013) 587-609.

Measurement of the B(s) to $\mu^+ \mu^-$ branching fraction and search for B0 to $\mu^+ \mu^-$ with the CMS Experiment

CMS Collaboration

arXiv:1307.5025 [hep-ex].
10.1103/PhysRevLett.111.101804.
Phys.Rev.Lett. 111 (2013) 101804.

Measurement of the top-quark mass in all-jets $t\bar{t}$ events in pp collisions at $\sqrt{s}=7$ TeV

CMS Collaboration
arXiv:1307.4617 [hep-ex].
10.1140/epjc/s10052-014-2758-x.
Eur.Phys.J. C74 (2014) 4, 2758.

Study of the production of charged pions, kaons, and protons in pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV

CMS Collaboration
arXiv:1307.3442 [hep-ex].
10.1140/epjc/s10052-014-2847-x, 10.1140/epjc/210052-014-2847-x.
Eur.Phys.J. C74 (2014) 6, 2847.

Determination of the top-quark pole mass and strong coupling constant from the $t\bar{t}$ production cross section in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1307.1907 [hep-ex].
10.1016/j.physletb.2014.08.040, 10.1016/j.physletb.2013.12.009.
Phys.Lett. B728 (2014) 496-517, Erratum-ibid. B728 (2014) 526-528.

Search for top squarks in R -parity-violating supersymmetry using three or more leptons and b-tagged jets

CMS Collaboration
arXiv:1306.6643 [hep-ex].
10.1103/PhysRevLett.111.221801.
Phys.Rev.Lett. 111 (2013) 22, 221801.

The performance of the CMS muon detector in proton-proton collisions at $\sqrt{s} = 7$ TeV at the LHC

CMS Collaboration
arXiv:1306.6905 [physics.ins-det].
10.1088/1748-0221/8/11/P11002.
JINST 8 (2013) P11002.

Energy Calibration and Resolution of the CMS Electromagnetic Calorimeter in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1306.2016 [hep-ex].
10.1088/1748-0221/8/09/P09009.
JINST 8 (2013) P09009.

Measurement of the W^+W^- Cross section in pp Collisions at $\sqrt{s} = 7$ TeV and Limits

on Anomalous $WW\gamma$ and WWZ couplings

CMS Collaboration

arXiv:1306.1126 [hep-ex].

10.1140/epjc/s10052-013-2610-8.

Eur.Phys.J. C73 (2013) 10, 2610.

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

CMS Collaboration

arXiv:1305.7389 [hep-ex].

10.1007/JHEP10(2013)062.

JHEP 1310 (2013) 062.

Measurement of neutral strange particle production in the underlying event in proton-proton collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1305.6016 [hep-ex].

10.1103/PhysRevD.88.052001.

Phys.Rev. D88 (2013) 052001.

Study of exclusive two-photon production of W^+W^- in pp collisions at $\sqrt{s} = 7$ TeV and constraints on anomalous quartic gauge couplings

CMS Collaboration

arXiv:1305.5596 [hep-ex].

10.1007/JHEP07(2013)116.

JHEP 1307 (2013) 116.

Search for gluino mediated bottom and top-squark production in multijet final states in pp collisions at 8 TeV

CMS Collaboration

arXiv:1305.2390 [hep-ex].

10.1016/j.physletb.2013.06.058.

Phys.Lett. B725 (2013) 243-270.

Multiplicity and transverse momentum dependence of two and four-particle correlations in pPb and PbPb collisions

CMS Collaboration

arXiv:1305.0609 [nucl-ex].

10.1016/j.physletb.2013.06.028.

Phys.Lett. B724 (2013) 213-240.

Searches for long-lived charged particles in pp collisions at $\sqrt{s}=7$ and 8 TeV

CMS Collaboration

arXiv:1305.0491 [hep-ex].

10.1007/JHEP07(2013)122.

JHEP 1307 (2013) 122.

Measurement of the ratio of the inclusive 3-jet cross section to the inclusive 2-jet cross section in pp collisions at $\sqrt{s} = 7$ TeV and first determination of the strong coupling constant in the TeV range

CMS Collaboration

arXiv:1304.7498 [hep-ex].

10.1140/epjc/s10052-013-2604-6.

Eur.Phys.J. C73 (2013) 10, 2604.

Measurement of the Λ_b^0 lifetime in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1304.7495 [hep-ex].

10.1007/JHEP07(2013)163.

JHEP 1307 (2013) 163.

Measurement of masses in the $t\bar{t}$ system by kinematic endpoints in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1304.5783 [hep-ex].

10.1140/epjc/s10052-013-2494-7.

Eur.Phys.J. C73 (2013) 2494.

Search for a standard-model-like Higgs boson with a mass in the range 145 to 1000 GeV at the LHC

CMS Collaboration

arXiv:1304.0213 [hep-ex].

10.1140/epjc/s10052-013-2469-8.

Eur.Phys.J. C73 (2013) 6, 2469.

Measurement of the $\Upsilon(1S)$, $\Upsilon(2S)$, and $\Upsilon(3S)$ cross sections in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1303.5900 [hep-ex].

10.1016/j.physletb.2013.10.033.

Phys.Lett. B727 (2013) 101-125.

Search for microscopic black holes in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1303.5338 [hep-ex].

10.1007/JHEP07(2013)178.

JHEP 1307 (2013) 178.

Studies of jet mass in dijet and W/Z + jet events

CMS Collaboration

arXiv:1303.4811 [hep-ex].

10.1007/JHEP05(2013)090.
JHEP 1305 (2013) 090.

Observation of a new boson with mass near 125 GeV in pp collisions at $\sqrt{s} = 7$ and 8 TeV

CMS Collaboration
arXiv:1303.4571 [hep-ex].
10.1007/JHEP06(2013)081.
JHEP 1306 (2013) 081.

A New Boson with a Mass of 125 GeV Observed with the CMS Experiment at the Large Hadron Collider

CMS Collaboration
10.1126/science.1230816.
Science 338 (2012) 1569-1575.

Measurement of associated production of vector bosons and top quark-antiquark pairs at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1303.3239 [hep-ex].
10.1103/PhysRevLett.110.172002.
Phys.Rev.Lett. 110 (2013) 172002.

Search for supersymmetry in hadronic final states with missing transverse energy using the variables α_T and b-quark multiplicity in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1303.2985 [hep-ex].
10.1140/epjc/s10052-013-2568-6.
Eur.Phys.J. C73 (2013) 9, 2568.

Search for the standard model Higgs boson produced in association with a top-quark pair in pp collisions at the LHC

CMS Collaboration
arXiv:1303.0763 [hep-ex].
10.1007/JHEP05(2013)145.
JHEP 1305 (2013) 145.

Search for narrow resonances using the dijet mass spectrum in pp collisions at $\sqrt{s}=8$ TeV

CMS Collaboration
arXiv:1302.4794 [hep-ex].
10.1103/PhysRevD.87.114015.
Phys.Rev. D87 (2013) 11, 114015.

Measurement of the X(3872) production cross section via decays to J/psi pi pi in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1302.3968 [hep-ex].
10.1007/JHEP04(2013)154.
JHEP 1304 (2013) 154.

Search for a Higgs boson decaying into a b-quark pair and produced in association with b quarks in proton-proton collisions at 7 TeV

CMS Collaboration
arXiv:1302.2892 [hep-ex].
10.1016/j.physletb.2013.04.017.
Phys.Lett. B722 (2013) 207-232.

Search for new physics in final states with a lepton and missing transverse energy in pp collisions at the LHC

CMS Collaboration
arXiv:1302.2812 [hep-ex].
10.1103/PhysRevD.87.072005.
Phys.Rev. D87 (2013) 7, 072005.

Study of the underlying event at forward rapidity in pp collisions at $\sqrt{s} = 0.9, 2.76$, and 7 TeV

CMS Collaboration
arXiv:1302.2394 [hep-ex].
10.1007/JHEP04(2013)072.
JHEP 1304 (2013) 072.

Searches for Higgs bosons in pp collisions at $\sqrt{s} = 7$ and 8 TeV in the context of four-generation and fermiophobic models

CMS Collaboration
arXiv:1302.1764 [hep-ex].
10.1016/j.physletb.2013.06.043.
Phys.Lett. B725 (2013) 36-59.

Search for pair-produced dijet resonances in four-jet final states in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1302.0531 [hep-ex].
10.1103/PhysRevLett.110.141802.
Phys.Rev.Lett. 110 (2013) 141802.

Measurement of the $t\bar{t}$ production cross section in the all-jet final state in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1302.0508 [hep-ex].
10.1007/JHEP05(2013)065.
JHEP 1305 (2013) 065.

Measurement of the top-antitop production cross section in the tau+jets channel in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1301.5755 [hep-ex].

10.1140/epjc/s10052-013-2386-x.

Eur.Phys.J. C73 (2013) 4, 2386.

Search for contact interactions using the inclusive jet p_T spectrum in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1301.5023 [hep-ex].

10.1103/PhysRevD.87.052017.

Phys.Rev. D87 (2013) 5, 052017.

Measurement of $W+W$ and ZZ production cross sections in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration

arXiv:1301.4698 [hep-ex].

10.1016/j.physletb.2013.03.027.

Phys.Lett. B721 (2013) 190-211.

Search for physics beyond the standard model in events with τ leptons, jets, and large transverse momentum imbalance in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1301.3792 [hep-ex].

10.1140/epjc/s10052-013-2493-8.

Eur.Phys.J. C73 (2013) 2493.

Interpretation of Searches for Supersymmetry with simplified Models

CMS Collaboration

arXiv:1301.2175 [hep-ex].

10.1103/PhysRevD.88.052017.

Phys.Rev. D88 (2013) 5, 052017.

Event shapes and azimuthal correlations in $Z +$ jets events in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1301.1646 [hep-ex].

10.1016/j.physletb.2013.04.025.

Phys.Lett. B722 (2013) 238-261.

Search for supersymmetry in events with opposite-sign dileptons and missing transverse energy using an artificial neural network

CMS Collaboration

arXiv:1301.0916 [hep-ex].

10.1103/PhysRevD.87.072001.
Phys.Rev. D87 (2013) 072001.

Search for supersymmetry in pp collisions at $\sqrt{s} = 7$ TeV in events with a single lepton, jets, and missing transverse momentum

CMS Collaboration
arXiv:1212.6428 [hep-ex].
10.1140/epjc/s10052-013-2404-z.
Eur.Phys.J. C73 (2013) 2404.

Study of the Mass and Spin-Parity of the Higgs Boson Candidate Via Its Decays to Z Boson Pairs

CMS Collaboration
arXiv:1212.6639 [hep-ex].
10.1103/PhysRevLett.110.081803.
Phys.Rev.Lett. 110 (2013) 081803.

Measurements of differential jet cross sections in proton-proton collisions at $\sqrt{s} = 7$ TeV with the CMS detector

CMS Collaboration
arXiv:1212.6660 [hep-ex].
10.1103/PhysRevD.87.112002.
Phys.Rev. D87 (2013) 11, 112002.

Measurement of the $t\bar{t}$ production cross section in pp collisions at $\sqrt{s} = 7$ TeV with lepton + jets final states

CMS Collaboration
arXiv:1212.6682.
10.1016/j.physletb.2013.02.021.
Phys.Lett. B720 (2013) 83-104.

Inclusive search for supersymmetry using the razor variables in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1212.6961 [hep-ex].
10.1103/PhysRevLett.111.081802.
Phys.Rev.Lett. 111 (2013) 8, 081802.

Search for new physics in events with same-sign dileptons and b jets in pp collisions at $\sqrt{s} = 8$ TeV

CMS Collaboration
arXiv:1212.6194 [hep-ex].
10.1007/JHEP07(2013)041, 10.1007/JHEP03(2013)037.
JHEP 1303 (2013) 037, Erratum-ibid. 1307 (2013) 041.

Search for heavy narrow dilepton resonances in pp collisions at $\sqrt{s} = 7$ TeV and $\sqrt{s} = 8$

TeV

CMS Collaboration

arXiv:1212.6175 [hep-ex].

10.1016/j.physletb.2013.02.003.

Phys.Lett. B720 (2013) 63-82.

Search for contact interactions in $\mu^+\mu^-$ events in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1212.4563 [hep-ex].

10.1103/PhysRevD.87.032001.

Phys.Rev. D87 (2013) 3, 032001.

Search for heavy resonances in the W/Z-tagged dijet mass spectrum in pp collisions at 7 TeV

CMS Collaboration

arXiv:1212.1910 [hep-ex].

10.1016/j.physletb.2013.05.040.

Phys.Lett. B723 (2013) 280-301.

Search for long-lived particles decaying to photons and missing energy in proton-proton collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1212.1838 [hep-ex].

10.1016/j.physletb.2013.04.027.

Phys.Lett. B722 (2013) 273-294.

Search for exotic resonances decaying into WZ/ZZ in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1211.5779 [hep-ex].

10.1007/JHEP02(2013)036.

JHEP 1302 (2013) 036.

Measurement of the ZZ production cross section and search for anomalous couplings in 2 l2l' final states in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1211.4890 [hep-ex].

10.1007/JHEP01(2013)063.

JHEP 1301 (2013) 063.

Search for new physics in events with photons, jets, and missing transverse energy in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1211.4784 [hep-ex].

10.1007/JHEP03(2013)111.

JHEP 1303 (2013) 111.

Identification of b-quark jets with the CMS experiment

CMS Collaboration

arXiv:1211.4462 [hep-ex].

10.1088/1748-0221/8/04/P04013.

JINST 8 (2013) P04013.

Search for Z' resonances decaying to $t\bar{t}$ in dilepton+jets final states in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1211.3338 [hep-ex].

10.1103/PhysRevD.87.072002.

Phys.Rev. D87 (2013) 072002.

Search for supersymmetry in final states with a single lepton, b -quark jets, and missing transverse energy in proton-proton collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1211.3143 [hep-ex].

10.1103/PhysRevD.87.052006.

Phys.Rev. D87 (2013) 5, 052006.

Search in leptonic channels for heavy resonances decaying to long-lived neutral particles

CMS Collaboration

arXiv:1211.2472 [hep-ex].

10.1007/JHEP02(2013)085.

JHEP 1302 (2013) 085.

Measurement of differential top-quark pair production cross sections in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1211.2220 [hep-ex].

10.1140/epjc/s10052-013-2339-4.

Eur.Phys.J. C73 (2013) 3, 2339.

Search for supersymmetry in final states with missing transverse energy and 0, 1, 2, or at least 3 b -quark jets in 7 TeV pp collisions using the variable α_T

CMS Collaboration

arXiv:1210.8115 [hep-ex].

10.1007/JHEP01(2013)077.

JHEP 1301 (2013) 077.

Search for a non-standard-model Higgs boson decaying to a pair of new light bosons in four-muon final states

CMS Collaboration

arXiv:1210.7619 [hep-ex].

10.1016/j.physletb.2013.09.009.

Phys.Lett. B726 (2013) 564-586.

Measurement of the sum of WW and WZ production with W +dijet events in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1210.7544 [hep-ex].

10.1140/epjc/s10052-013-2283-3.

Eur.Phys.J. C73 (2013) 2, 2283.

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

CMS Collaboration

arXiv:1210.7471 [hep-ex].

10.1007/JHEP01(2013)154.

JHEP 1301 (2013) 154.

Measurement of the inelastic proton-proton cross section at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1210.6718 [hep-ex].

10.1016/j.physletb.2013.03.024.

Phys.Lett. B722 (2013) 5-27.

Search for pair production of third-generation leptoquarks and top squarks in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1210.5629 [hep-ex].

10.1103/PhysRevLett.110.081801.

Phys.Rev.Lett. 110 (2013) 081801.

Search for third-generation leptoquarks and scalar bottom quarks in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1210.5627 [hep-ex].

10.1007/JHEP12(2012)055.

JHEP 1212 (2012) 055.

Observation of long-range near-side angular correlations in proton-lead collisions at the LHC

CMS Collaboration

arXiv:1210.5482 [nucl-ex].

10.1016/j.physletb.2012.11.025.

Phys.Lett. B718 (2013) 795-814.

Observation of Z decays to four leptons with the CMS detector at the LHC

CMS Collaboration

arXiv:1210.3844 [hep-ex].

10.1007/JHEP12(2012)034.

JHEP 1212 (2012) 034.

Search for excited leptons in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1210.2422 [hep-ex].

10.1016/j.physletb.2013.02.031.

Phys.Lett. B720 (2013) 309-329.

Search for heavy neutrinos and W[R] bosons with right-handed couplings in a left-right symmetric model in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1210.2402 [hep-ex].

10.1103/PhysRevLett.109.261802.

Phys.Rev.Lett. 109 (2012) 261802.

Search for narrow resonances and quantum black holes in inclusive and b -tagged dijet mass spectra from pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1210.2387 [hep-ex].

10.1007/JHEP01(2013)013.

JHEP 1301 (2013) 013.

Search for fractionally charged particles in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1210.2311 [hep-ex].

10.1103/PhysRevD.87.092008.

Phys.Rev. D87 (2013) 9, 092008.

Search for supersymmetry in events with photons and low missing transverse energy in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1210.2052 [hep-ex].

10.1016/j.physletb.2012.12.055.

Phys.Lett. B719 (2013) 42-61.

Search for heavy lepton partners of neutrinos in proton-proton collisions in the context of the type III seesaw mechanism

CMS Collaboration

arXiv:1210.1797 [hep-ex].

10.1016/j.physletb.2012.10.070.

Phys.Lett. B718 (2012) 348-368.

Measurement of the relative prompt production rate of $\chi(c2)$ and $\chi(c1)$ in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1210.0875 [hep-ex].

10.1140/epjc/s10052-012-2251-3.
Eur.Phys.J. C72 (2012) 2251.

Search for anomalous production of highly boosted Z bosons decaying to dimuons in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1210.0867 [hep-ex].
10.1016/j.physletb.2013.03.037.
Phys.Lett. B722 (2013) 28-47.

Measurement of the single-top-quark t -channel cross section in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1209.4533 [hep-ex].
10.1007/JHEP12(2012)035.
JHEP 1212 (2012) 035.

Search for resonant $t\bar{t}$ production in lepton+jets events in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1209.4397 [hep-ex].
10.1007/JHEP12(2012)015.
JHEP 1212 (2012) 015.

Search for the standard model Higgs boson produced in association with W and Z bosons in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1209.3937 [hep-ex].
10.1007/JHEP11(2012)088.
JHEP 1211 (2012) 088.

Search for a narrow spin-2 resonance decaying to a pair of Z vector bosons in the semileptonic final state

CMS Collaboration
arXiv:1209.3807 [hep-ex].
10.1016/j.physletb.2012.11.063.
Phys.Lett. B718 (2013) 1208-1228.

Measurement of the $Y1S$, $Y2S$ and $Y3S$ polarizations in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1209.2922 [hep-ex].
10.1103/PhysRevLett.110.081802.
Phys.Rev.Lett. 110 (2013) 081802.

Measurement of the top-quark mass in $t\bar{t}$ events with dilepton final states in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1209.2393 [hep-ex].
10.1140/epjc/s10052-012-2202-z.
Eur.Phys.J. C72 (2012) 2202.

Measurement of the top-quark mass in $t\bar{t}$ events with lepton+jets final states in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1209.2319 [hep-ex].
10.1007/JHEP12(2012)105.
JHEP 1212 (2012) 105.

Observation of a diffractive contribution to dijet production in proton-proton collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1209.1805 [hep-ex].
10.1103/PhysRevD.87.012006.
Phys.Rev. D87 (2013) 012006.

Search for exclusive or semi-exclusive photon pair production and observation of exclusive and semi-exclusive electron pair production in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1209.1666 [hep-ex].
10.1007/JHEP11(2012)080.
JHEP 1211 (2012) 080.

Combined search for the quarks of a sequential fourth generation

CMS Collaboration
arXiv:1209.1062 [hep-ex].
10.1103/PhysRevD.86.112003.
Phys.Rev. D86 (2012) 112003.

Search for pair produced fourth-generation up-type quarks in pp collisions at $\sqrt{s} = 7$ TeV with a lepton in the final state

CMS Collaboration
arXiv:1209.0471 [hep-ex].
10.1016/j.physletb.2012.10.038.
Phys.Lett. B718 (2012) 307-328.

Search for supersymmetry in events with b-quark jets and missing transverse energy in pp collisions at 7 TeV

CMS Collaboration
arXiv:1208.4859 [hep-ex].
10.1103/PhysRevD.86.072010.
Phys.Rev. D86 (2012) 072010.

Study of the dijet mass spectrum in $pp \rightarrow W + \text{jets}$ events at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1208.3477 [hep-ex].
10.1103/PhysRevLett.109.251801.
Phys.Rev.Lett. 109 (2012) 251801.

Search for three-jet resonances in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1208.2931 [hep-ex].
10.1016/j.physletb.2012.10.048.
Phys.Lett. B718 (2012) 329-347.

Observation of sequential Upsilon suppression in PbPb collisions

CMS Collaboration
arXiv:1208.2826 [nucl-ex].
10.1103/PhysRevLett.109.222301.
Phys.Rev.Lett. 109 (2012) 222301.

Measurement of the $t\bar{t}$ production cross section in the dilepton channel in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1208.2671 [hep-ex].
10.1007/JHEP11(2012)067.
JHEP 1211 (2012) 067.

Measurement of the azimuthal anisotropy of neutral pions in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV

CMS Collaboration
arXiv:1208.2470 [nucl-ex].
10.1103/PhysRevLett.110.042301.
Phys.Rev.Lett. 110 (2013) 042301.

Search for flavor changing neutral currents in top quark decays in pp collisions at 7 TeV

CMS Collaboration
arXiv:1208.0957 [hep-ex].
10.1016/j.physletb.2012.12.045.
Phys.Lett. B718 (2013) 1252-1272.

Search for a W' boson decaying to a bottom quark and a top quark in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1208.0956 [hep-ex].
10.1016/j.physletb.2012.12.008.
Phys.Lett. B718 (2013) 1229-1251.

Observation of a new boson at a mass of 125 GeV with the CMS experiment at the LHC

CMS Collaboration
arXiv:1207.7235 [hep-ex].
10.1016/j.physletb.2012.08.021.
Phys.Lett. B716 (2012) 30-61.

Search for heavy Majorana neutrinos in $\mu^+\mu^+[\mu^-\mu^-]$ and $e^+e^+[e^-e^-]$ events in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1207.6079 [hep-ex].
10.1016/j.physletb.2012.09.012.
Phys.Lett. B717 (2012) 109-128.

Search for pair production of first and second-generation scalar leptoquarks in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1207.5406 [hep-ex].
10.1103/PhysRevD.86.052013.
Phys.Rev. D86 (2012) 052013.

Study of the inclusive production of charged pions, kaons, and protons in pp collisions at $\sqrt{s} = 0.9, 2.76, \text{ and } 7$ TeV

CMS Collaboration
arXiv:1207.4724 [hep-ex].
10.1140/epjc/s10052-012-2164-1.
Eur.Phys.J. C72 (2012) 2164.

Forward-backward asymmetry of Drell-Yan lepton pairs in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1207.3973 [hep-ex].
10.1016/j.physletb.2012.10.082.
Phys.Lett. B718 (2013) 752-772.

A search for a doubly-charged Higgs boson in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1207.2666 [hep-ex].
10.1140/epjc/s10052-012-2189-5.
Eur.Phys.J. C72 (2012) 2189.

Measurement of the underlying event activity in pp collisions at $\sqrt{s} = 0.9$ and 7 TeV with the novel jet-area/median approach

CMS Collaboration
arXiv:1207.2392 [hep-ex].
10.1007/JHEP08(2012)130.
JHEP 1208 (2012) 130.

Search for new physics in the multijet and missing transverse momentum final state in

proton-proton collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1207.1898 [hep-ex].

10.1103/PhysRevLett.109.171803.

Phys.Rev.Lett. 109 (2012) 171803.

Search for supersymmetry in hadronic final states using MT2 in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1207.1798 [hep-ex].

10.1007/JHEP10(2012)018.

JHEP 1210 (2012) 018.

Search for a fermiophobic Higgs boson in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1207.1130 [hep-ex].

10.1007/JHEP09(2012)111.

JHEP 1209 (2012) 111.

Search for new physics with long-lived particles decaying to photons and missing energy in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1207.0627 [hep-ex].

10.1007/JHEP11(2012)172.

JHEP 1211 (2012) 172.

Search for stopped long-lived particles produced in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1207.0106 [hep-ex].

10.1007/JHEP08(2012)026.

JHEP 1208 (2012) 026.

Inclusive and differential measurements of the $t\bar{t}$ charge asymmetry in proton-proton collisions at 7 TeV

CMS Collaboration

arXiv:1207.0065 [hep-ex].

10.1016/j.physletb.2012.09.028.

Phys.Lett. B717 (2012) 129-150.

Search for a light pseudoscalar Higgs boson in the dimuon decay channel in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1206.6326 [hep-ex].

10.1103/PhysRevLett.109.121801.

Phys.Rev.Lett. 109 (2012) 121801.

Search for dark matter and large extra dimensions in monojet events in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1206.5663 [hep-ex].

10.1007/JHEP09(2012)094.

JHEP 1209 (2012) 094.

Search for new physics in events with opposite-sign leptons, jets, and missing transverse energy in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1206.3949 [hep-ex].

10.1016/j.physletb.2012.11.036.

Phys.Lett. B718 (2013) 815-840.

Search for charge-asymmetric production of W' bosons in top pair + jet events from pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1206.3921 [hep-ex].

10.1016/j.physletb.2012.09.048.

Phys.Lett. B717 (2012) 351-370.

Measurement of the electron charge asymmetry in inclusive W production in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1206.2598 [hep-ex].

10.1103/PhysRevLett.109.111806.

Phys.Rev.Lett. 109 (2012) 111806.

Search for narrow resonances in dilepton mass spectra in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1206.1849 [hep-ex].

10.1016/j.physletb.2012.06.051.

Phys.Lett. B714 (2012) 158-179.

Search for high mass resonances decaying into τ^+ lepton pairs in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1206.1725 [hep-ex].

10.1016/j.physletb.2012.07.062.

Phys.Lett. B716 (2012) 82-102.

Search for a W' or Techni- ρ Decaying into WZ in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1206.0433 [hep-ex].

10.1103/PhysRevLett.109.141801.

Phys.Rev.Lett. 109 (2012) 141801.

Search for new physics with same-sign isolated dilepton events with jets and missing transverse energy

CMS Collaboration

arXiv:1205.6615 [hep-ex].

10.1103/PhysRevLett.109.071803.

Phys.Rev.Lett. 109 (2012) 071803.

Study of W boson production in PbPb and pp collisions at $\sqrt{s_{NN}} = 2.76$ TeV

CMS Collaboration

arXiv:1205.6334 [nucl-ex].

10.1016/j.physletb.2012.07.025.

Phys.Lett. B715 (2012) 66-87.

Measurement of jet fragmentation into charged particles in pp and PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV

CMS Collaboration

arXiv:1205.5872 [nucl-ex].

10.1007/JHEP10(2012)087.

JHEP 1210 (2012) 087.

Search for a light charged Higgs boson in top quark decays in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1205.5736 [hep-ex].

10.1007/JHEP07(2012)143.

JHEP 1207 (2012) 143.

Search for new physics in events with same-sign dileptons and b -tagged jets in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1205.3933 [hep-ex].

10.1007/JHEP08(2012)110.

JHEP 1208 (2012) 110.

Measurement of the pseudorapidity and centrality dependence of the transverse energy density in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV

CMS Collaboration

arXiv:1205.2488 [nucl-ex].

10.1103/PhysRevLett.109.152303.

Phys.Rev.Lett. 109 (2012) 152303.

Measurement of the Λ_{b} cross section and the $\bar{\Lambda}(b)$ to Λ_{b} ratio with Λ_{b} to J/Psi Λ decays in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1205.0594 [hep-ex].
10.1016/j.physletb.2012.05.063.
Phys.Lett. B714 (2012) 136-157.

Search for heavy long-lived charged particles in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1205.0272 [hep-ex].
10.1016/j.physletb.2012.06.023.
Phys.Lett. B713 (2012) 408-433.

Studies of jet quenching using isolated-photon+jet correlations in PbPb and pp collisions at $\sqrt{s_{NN}} = 2.76$ TeV

CMS Collaboration
arXiv:1205.0206 [nucl-ex].
10.1016/j.physletb.2012.11.003.
Phys.Lett. B718 (2013) 773-794.

Observation of a new $\Xi(b)$ baryon

CMS Collaboration
arXiv:1204.5955 [hep-ex].
10.1103/PhysRevLett.108.252002.
Phys.Rev.Lett. 108 (2012) 252002.

Search for anomalous production of multilepton events in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1204.5341 [hep-ex].
10.1007/JHEP06(2012)169.
JHEP 1206 (2012) 169.

Search for leptonic decays of W ' bosons in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1204.4764 [hep-ex].
10.1007/JHEP08(2012)023.
JHEP 1208 (2012) 023.

Shape, Transverse Size, and Charged Hadron Multiplicity of Jets in pp Collisions at 7 TeV

CMS Collaboration
arXiv:1204.3170 [hep-ex].
10.1007/JHEP06(2012)160.
JHEP 1206 (2012) 160.

Measurement of the mass difference between top and antitop quarks

CMS Collaboration
arXiv:1204.2807 [hep-ex].

10.1007/JHEP06(2012)109.
JHEP 1206 (2012) 109.

Search for Anomalous $t\bar{t}$ Production in the Highly-Boosted All-Hadronic Final State

CMS Collaboration
arXiv:1204.2488 [hep-ex].
10.1007/JHEP03(2014)132, 10.1007/JHEP09(2012)029.
JHEP 1209 (2012) 029, Erratum-ibid. 1403 (2014) 132.

Azimuthal anisotropy of charged particles at high transverse momenta in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV

CMS Collaboration
arXiv:1204.1850 [nucl-ex].
10.1103/PhysRevLett.109.022301.
Phys.Rev.Lett. 109 (2012) 022301.

Measurement of the Z/gamma*+b-jet cross section in pp collisions at 7 TeV

CMS Collaboration
arXiv:1204.1643 [hep-ex].
10.1007/JHEP06(2012)126.
JHEP 1206 (2012) 126.

Measurement of the elliptic anisotropy of charged particles produced in PbPb collisions at nucleon-nucleon center-of-mass energy = 2.76 TeV

CMS Collaboration
arXiv:1204.1409 [nucl-ex].
10.1103/PhysRevC.87.014902.
Phys.Rev. C87 (2013) 014902.

Measurement of the underlying event in the Drell-Yan process in proton-proton collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1204.1411 [hep-ex].
10.1140/epjc/s10052-012-2080-4.
Eur.Phys.J. C72 (2012) 2080.

Search for heavy bottom-like quarks in 4.9 inverse femtobarns of pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1204.1088 [hep-ex].
10.1007/JHEP05(2012)123.
JHEP 1205 (2012) 123.

Search for Dark Matter and Large Extra Dimensions in pp Collisions Yielding a Photon and Missing Transverse Energy

CMS Collaboration

arXiv:1204.0821 [hep-ex].
10.1103/PhysRevLett.108.261803.
Phys.Rev.Lett. 108 (2012) 261803.

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

CMS Collaboration
arXiv:1204.0696 [hep-ex].
10.1140/epjc/s10052-012-2216-6.
Eur.Phys.J. C72 (2012) 2216.

Measurement of the top quark pair production cross section in pp collisions at $\sqrt{s} = 7$ TeV in dilepton final states containing a τ

CMS Collaboration
arXiv:1203.6810 [hep-ex].
10.1103/PhysRevD.85.112007.
Phys.Rev. D85 (2012) 112007.

Search for heavy, top-like quark pair production in the dilepton final state in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1203.5410 [hep-ex].
10.1016/j.physletb.2012.07.059.
Phys.Lett. B716 (2012) 103-121.

Search for $B_s^0 \rightarrow \mu^+ \mu^-$ and $B^0 \rightarrow \mu^+ \mu^-$ decays

CMS Collaboration
arXiv:1203.3976 [hep-ex].
10.1007/JHEP04(2012)033.
JHEP 1204 (2012) 033.

Measurement of the cross section for production of $b\bar{b}$ X , decaying to muons in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1203.3458 [hep-ex].
10.1007/JHEP06(2012)110.
JHEP 1206 (2012) 110.

Search for microscopic black holes in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1202.6396 [hep-ex].
10.1007/JHEP04(2012)061.
JHEP 1204 (2012) 061.

Search for quark compositeness in dijet angular distributions from pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1202.5535 [hep-ex].
10.1007/JHEP05(2012)055.
JHEP 1205 (2012) 055.

Jet momentum dependence of jet quenching in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV
CMS Collaboration
arXiv:1202.5022 [nucl-ex].
10.1016/j.physletb.2012.04.058.
Phys.Lett. B712 (2012) 176-197.

Inclusive b -jet production in pp collisions at $\sqrt{s} = 7$ TeV
CMS Collaboration
arXiv:1202.4617 [hep-ex].
10.1007/JHEP04(2012)084.
JHEP 1204 (2012) 084.

Search for the standard model Higgs boson decaying to bottom quarks in pp collisions at $\sqrt{s} = 7$ TeV
CMS Collaboration
arXiv:1202.4195 [hep-ex].
10.1016/j.physletb.2012.02.085.
Phys.Lett. B710 (2012) 284-306.

Search for neutral Higgs bosons decaying to τ pairs in pp collisions at $\sqrt{s} = 7$ TeV
CMS Collaboration
arXiv:1202.4083 [hep-ex].
10.1016/j.physletb.2012.05.028.
Phys.Lett. B713 (2012) 68-90.

Search for large extra dimensions in dimuon and dielectron events in pp collisions at $\sqrt{s} = 7$ TeV
CMS Collaboration
arXiv:1202.3827 [hep-ex].
10.1016/j.physletb.2012.03.029.
Phys.Lett. B711 (2012) 15-34.

Search for the standard model Higgs boson in the H to ZZ to $2\ell 2\nu$ channel in pp collisions at $\sqrt{s} = 7$ TeV
CMS Collaboration
arXiv:1202.3478 [hep-ex].
10.1007/JHEP03(2012)040.
JHEP 1203 (2012) 040.

Search for the standard model Higgs boson in the H to ZZ to $\ell\ell\tau\tau$ decay channel in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1202.3617 [hep-ex].
10.1007/JHEP03(2012)081.
JHEP 1203 (2012) 081.

Study of high-pT charged particle suppression in PbPb compared to pp collisions at $\sqrt{s_{NN}} = 2.76$ TeV

CMS Collaboration
arXiv:1202.2554 [nucl-ex].
10.1140/epjc/s10052-012-1945-x.
Eur.Phys.J. C72 (2012) 1945.

Search for the standard model Higgs boson in the decay channel H to ZZ to 4 leptons in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1202.1997 [hep-ex].
10.1103/PhysRevLett.108.111804.
Phys.Rev.Lett. 108 (2012) 111804.

Combined results of searches for the standard model Higgs boson in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1202.1488 [hep-ex].
10.1016/j.physletb.2012.02.064.
Phys.Lett. B710 (2012) 26-48.

Search for the standard model Higgs boson decaying into two photons in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1202.1487 [hep-ex].
10.1016/j.physletb.2012.03.003.
Phys.Lett. B710 (2012) 403-425.

Search for a Higgs boson in the decay channel H to $ZZ^{(*)}$ to $q \bar{q} \ell^+ \ell^-$ in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1202.1416 [hep-ex].
10.1007/JHEP04(2012)036.
JHEP 1204 (2012) 036.

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

CMS Collaboration
arXiv:1202.0704 [hep-ex].
10.1007/JHEP06(2012)036.
JHEP 1206 (2012) 036.

Suppression of non-prompt J/ψ , prompt J/ψ , and $\Upsilon(1S)$ in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV

CMS Collaboration

arXiv:1201.5069 [nucl-ex].

10.1007/JHEP05(2012)063.

JHEP 1205 (2012) 063.

Centrality dependence of dihadron correlations and azimuthal anisotropy harmonics in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV

CMS Collaboration

arXiv:1201.3158 [nucl-ex].

10.1140/epjc/s10052-012-2012-3.

Eur.Phys.J. C72 (2012) 2012.

Measurement of isolated photon production in pp and PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV

CMS Collaboration

arXiv:1201.3093 [nucl-ex].

10.1016/j.physletb.2012.02.077.

Phys.Lett. B710 (2012) 256-277.

Measurement of the charge asymmetry in top-quark pair production in proton-proton collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1112.5100 [hep-ex].

10.1016/j.physletb.2012.01.078.

Phys.Lett. B709 (2012) 28-49.

Search for signatures of extra dimensions in the diphoton mass spectrum at the Large Hadron Collider

CMS Collaboration

arXiv:1112.0688 [hep-ex].

10.1103/PhysRevLett.108.111801.

Phys.Rev.Lett. 108 (2012) 111801.

Exclusive photon-photon production of muon pairs in proton-proton collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1111.5536 [hep-ex].

10.1007/JHEP01(2012)052.

JHEP 1201 (2012) 052.

J/ψ and ψ_{2S} production in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1111.1557 [hep-ex].

10.1007/JHEP02(2012)011.
JHEP 1202 (2012) 011.

Measurement of the Production Cross Section for Pairs of Isolated Photons in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1110.6461 [hep-ex].
10.1007/JHEP01(2012)133.
JHEP 1201 (2012) 133.

Measurement of the Rapidity and Transverse Momentum Distributions of Z Bosons in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1110.4973 [hep-ex].
10.1103/PhysRevD.85.032002.
Phys.Rev. D85 (2012) 032002.

Jet Production Rates in Association with W and Z Bosons in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1110.3226 [hep-ex].
10.1007/JHEP01(2012)010.
JHEP 1201 (2012) 010.

Measurement of the weak mixing angle with the Drell-Yan process in proton-proton collisions at the LHC

CMS Collaboration
arXiv:1110.2682 [hep-ex].
10.1103/PhysRevD.84.112002.
Phys.Rev. D84 (2011) 112002.

Measurement of energy flow at large pseudorapidities in pp collisions at $\sqrt{s} = 0.9$ and 7 TeV

CMS Collaboration
arXiv:1110.0211 [hep-ex].
10.1007/JHEP11(2011)148, 10.1007/JHEP02(2012)055.
JHEP 1111 (2011) 148, Erratum-ibid. 1202 (2012) 055.

Forward Energy Flow, Central Charged-Particle Multiplicities, and Pseudorapidity Gaps in W and Z Boson Events from pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1110.0181 [hep-ex].
10.1140/epjc/s10052-011-1839-3.
Eur.Phys.J. C72 (2012) 1839.

Performance of tau-lepton reconstruction and identification in CMS

CMS Collaboration
arXiv:1109.6034 [physics.ins-det].
10.1088/1748-0221/7/01/P01001.
JINST 7 (2012) P01001.

Search for a Vector-like Quark with Charge 2/3 in $t + Z$ Events from pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1109.4985 [hep-ex].
10.1103/PhysRevLett.107.271802.
Phys.Rev.Lett. 107 (2011) 271802.

Search for Supersymmetry at the LHC in Events with Jets and Missing Transverse Energy

CMS Collaboration
arXiv:1109.2352 [hep-ex].
10.1103/PhysRevLett.107.221804.
Phys.Rev.Lett. 107 (2011) 221804.

Measurement of the Differential Cross Section for Isolated Prompt Photon Production in pp Collisions at 7 TeV

CMS Collaboration
arXiv:1108.2044 [hep-ex].
10.1103/PhysRevD.84.052011.
Phys.Rev. D84 (2011) 052011.

Measurement of the Drell-Yan Cross Section in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1108.0566 [hep-ex].
10.1007/JHEP10(2011)007.
JHEP 1110 (2011) 007.

Search for B(s) and B to dimuon decays in pp collisions at 7 TeV

CMS Collaboration
arXiv:1107.5834 [hep-ex].
10.1103/PhysRevLett.107.191802.
Phys.Rev.Lett. 107 (2011) 191802.

Search for Resonances in the Dijet Mass Spectrum from 7 TeV pp Collisions at CMS

CMS Collaboration
arXiv:1107.4771 [hep-ex].
10.1016/j.physletb.2011.09.015.
Phys.Lett. B704 (2011) 123-142.

Measurement of the Inclusive W and Z Production Cross Sections in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1107.4789 [hep-ex].
10.1007/JHEP10(2011)132.
JHEP 1110 (2011) 132.

Dependence on pseudorapidity and centrality of charged hadron production in PbPb collisions at a nucleon-nucleon centre-of-mass energy of 2.76 TeV

CMS Collaboration
arXiv:1107.4800 [nucl-ex].
10.1007/JHEP08(2011)141.
JHEP 1108 (2011) 141.

Determination of Jet Energy Calibration and Transverse Momentum Resolution in CMS

CMS Collaboration
arXiv:1107.4277 [physics.ins-det].
10.1088/1748-0221/6/11/P11002.
JINST 6 (2011) P11002.

Search for Three-Jet Resonances in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1107.3084 [hep-ex].
10.1103/PhysRevLett.107.101801.
Phys.Rev.Lett. 107 (2011) 101801.

Search for supersymmetry in pp collisions at $\sqrt{s} = 7$ TeV in events with a single lepton, jets, and missing transverse momentum

CMS Collaboration
arXiv:1107.1870 [hep-ex].
10.1007/JHEP08(2011)156.
JHEP 1108 (2011) 156.

A search for excited leptons in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1107.1773 [hep-ex].
10.1016/j.physletb.2011.09.021.
Phys.Lett. B704 (2011) 143-162.

Inclusive search for squarks and gluinos in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1107.1279 [hep-ex].
10.1103/PhysRevD.85.012004.
Phys.Rev. D85 (2012) 012004.

Measurement of the Underlying Event Activity at the LHC with $\sqrt{s} = 7$ TeV and Comparison with $\sqrt{s} = 0.9$ TeV

CMS Collaboration

arXiv:1107.0330 [hep-ex].
10.1007/JHEP09(2011)109.
JHEP 1109 (2011) 109.

Missing transverse energy performance of the CMS detector

CMS Collaboration
arXiv:1106.5048 [physics.ins-det].
10.1088/1748-0221/6/09/P09001.
JINST 6 (2011) P09001.

Search for New Physics with a Mono-Jet and Missing Transverse Energy in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1106.4775 [hep-ex].
10.1103/PhysRevLett.107.201804.
Phys.Rev.Lett. 107 (2011) 201804.

Search for New Physics with Jets and Missing Transverse Momentum in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1106.4503 [hep-ex].
10.1007/JHEP08(2011)155.
JHEP 1108 (2011) 155.

Measurement of the Strange B Meson Production Cross Section with J/Ψ ϕ Decays in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1106.4048 [hep-ex].
10.1103/PhysRevD.84.052008.
Phys.Rev. D84 (2011) 052008.

Search for Supersymmetry in Events with b Jets and Missing Transverse Momentum at the LHC

CMS Collaboration
arXiv:1106.3272 [hep-ex].
10.1007/JHEP07(2011)113.
JHEP 1107 (2011) 113.

Measurement of the t -channel single top quark production cross section in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1106.3052 [hep-ex].
10.1103/PhysRevLett.107.091802.
Phys.Rev.Lett. 107 (2011) 091802.

Search for Light Resonances Decaying into Pairs of Muons as a Signal of New Physics

CMS Collaboration
arXiv:1106.2375 [hep-ex].
10.1007/JHEP07(2011)098.
JHEP 1107 (2011) 098.

Search for Same-Sign Top-Quark Pair Production at $\sqrt{s} = 7$ TeV and Limits on Flavour Changing Neutral Currents in the Top Sector

CMS Collaboration
arXiv:1106.2142 [hep-ex].
10.1007/JHEP08(2011)005.
JHEP 1108 (2011) 005.

Measurement of the Top-antitop Production Cross Section in pp Collisions at $\sqrt{s} = 7$ TeV using the Kinematic Properties of Events with Leptons and Jets

CMS Collaboration
arXiv:1106.0902 [hep-ex].
10.1140/epjc/s10052-011-1721-3.
Eur.Phys.J. C71 (2011) 1721.

Search for Physics Beyond the Standard Model Using Multilepton Signatures in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1106.0933 [hep-ex].
10.1016/j.physletb.2011.09.047.
Phys.Lett. B704 (2011) 411-433.

Measurement of the Ratio of the 3-jet to 2-jet Cross Sections in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1106.0647 [hep-ex].
10.1016/j.physletb.2011.07.067.
Phys.Lett. B702 (2011) 336-354.

Measurement of the Inclusive Jet Cross Section in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1106.0208 [hep-ex].
10.1103/PhysRevLett.107.132001.
Phys.Rev.Lett. 107 (2011) 132001.

Measurement of the $t\bar{t}$ production cross section and the top quark mass in the dilepton channel in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1105.5661 [hep-ex].
10.1007/JHEP07(2011)049.
JHEP 1107 (2011) 049.

Search for First Generation Scalar Leptoquarks in the $evjj$ channel in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1105.5237 [hep-ex].

10.1016/j.physletb.2011.07.089.

Phys.Lett. B703 (2011) 246-266.

Indications of suppression of excited Υ states in PbPb collisions at $\sqrt{S_{NN}} = 2.76$ TeV

CMS Collaboration

arXiv:1105.4894 [nucl-ex].

10.1103/PhysRevLett.107.052302.

Phys.Rev.Lett. 107 (2011) 052302.

Search for supersymmetry in events with a lepton, a photon, and large missing transverse energy in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1105.3152 [hep-ex].

10.1007/JHEP06(2011)093.

JHEP 1106 (2011) 093.

Measurement of $W\gamma$ and $Z\gamma$ production in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1105.2758 [hep-ex].

10.1016/j.physletb.2011.06.034.

Phys.Lett. B701 (2011) 535-555.

Long-range and short-range dihadron angular correlations in central PbPb collisions at a nucleon-nucleon center of mass energy of 2.76 TeV

CMS Collaboration

arXiv:1105.2438 [nucl-ex].

10.1007/JHEP07(2011)076.

JHEP 1107 (2011) 076.

Charged particle transverse momentum spectra in pp collisions at $\sqrt{s} = 0.9$ and 7 TeV

CMS Collaboration

arXiv:1104.3547 [hep-ex].

10.1007/JHEP08(2011)086.

JHEP 1108 (2011) 086.

Measurement of the Polarization of W Bosons with Large Transverse Momenta in W+Jets Events at the LHC

CMS Collaboration

arXiv:1104.3829 [hep-ex].

10.1103/PhysRevLett.107.021802.

Phys.Rev.Lett. 107 (2011) 021802.

Search for new physics with same-sign isolated dilepton events with jets and missing transverse energy at the LHC

CMS Collaboration

arXiv:1104.3168 [hep-ex].

10.1007/JHEP06(2011)077.

JHEP 1106 (2011) 077.

Measurement of the B^0 production cross section in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1104.2892 [hep-ex].

10.1103/PhysRevLett.106.252001.

Phys.Rev.Lett. 106 (2011) 252001.

Measurement of the differential dijet production cross section in proton-proton collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1104.1693 [hep-ex].

10.1016/j.physletb.2011.05.027.

Phys.Lett. B700 (2011) 187-206.

Measurement of the Inclusive Z Cross Section via Decays to Tau Pairs in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1104.1617 [hep-ex].

10.1007/JHEP08(2011)117.

JHEP 1108 (2011) 117.

Search for Neutral MSSM Higgs Bosons Decaying to Tau Pairs in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1104.1619 [hep-ex].

10.1103/PhysRevLett.106.231801.

Phys.Rev.Lett. 106 (2011) 231801.

Search for Large Extra Dimensions in the Diphoton Final State at the Large Hadron Collider

CMS Collaboration

arXiv:1103.4279 [hep-ex].

10.1007/JHEP05(2011)085.

JHEP 1105 (2011) 085.

Measurement of the lepton charge asymmetry in inclusive W production in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1103.3470 [hep-ex].

10.1007/JHEP04(2011)050.
JHEP 1104 (2011) 050.

Search for Physics Beyond the Standard Model in Opposite-Sign Dilepton Events at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1103.1348 [hep-ex].
10.1007/JHEP06(2011)026.
JHEP 1106 (2011) 026.

Search for Supersymmetry in pp Collisions at $\sqrt{s} = 7$ TeV in Events with Two Photons and Missing Transverse Energy

CMS Collaboration
arXiv:1103.0953 [hep-ex].
10.1103/PhysRevLett.106.211802.
Phys.Rev.Lett. 106 (2011) 211802.

Search for Resonances in the Dilepton Mass Distribution in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1103.0981 [hep-ex].
10.1007/JHEP05(2011)093.
JHEP 1105 (2011) 093.

Search for a W' boson decaying to a muon and a neutrino in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1103.0030 [hep-ex].
10.1016/j.physletb.2011.05.048.
Phys.Lett. B701 (2011) 160-179.

Study of Z boson production in PbPb collisions at nucleon-nucleon centre of mass energy = 2.76 TeV

CMS Collaboration
arXiv:1102.5435 [nucl-ex].
10.1103/PhysRevLett.106.212301.
Phys.Rev.Lett. 106 (2011) 212301.

Search for a Heavy Bottom-like Quark in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1102.4746 [hep-ex].
10.1016/j.physletb.2011.05.074.
Phys.Lett. B701 (2011) 204-223.

Strange Particle Production in pp Collisions at $\sqrt{s} = 0.9$ and 7 TeV

CMS Collaboration

arXiv:1102.4282 [hep-ex].
10.1007/JHEP05(2011)064.
JHEP 1105 (2011) 064.

Measurement of $B\bar{B}$ Angular Correlations based on Secondary Vertex Reconstruction at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1102.3194 [hep-ex].
10.1007/JHEP03(2011)136.
JHEP 1103 (2011) 136.

Measurement of Dijet Angular Distributions and Search for Quark Compositeness in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1102.2020 [hep-ex].
10.1103/PhysRevLett.106.201804.
Phys.Rev.Lett. 106 (2011) 201804.

Observation and studies of jet quenching in PbPb collisions at nucleon-nucleon center-of-mass energy = 2.76 TeV

CMS Collaboration
arXiv:1102.1957 [nucl-ex].
10.1103/PhysRevC.84.024906.
Phys.Rev. C84 (2011) 024906.

First Measurement of Hadronic Event Shapes in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1102.0068 [hep-ex].
10.1016/j.physletb.2011.03.060.
Phys.Lett. B699 (2011) 48-67.

Dijet Azimuthal Decorrelations in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1101.5029 [hep-ex].
10.1103/PhysRevLett.106.122003.
Phys.Rev.Lett. 106 (2011) 122003.

Inclusive b-hadron production cross section with muons in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1101.3512 [hep-ex].
10.1007/JHEP03(2011)090.
JHEP 1103 (2011) 090.

Measurement of Bose-Einstein Correlations in pp Collisions at $\sqrt{s} = 0.9$ and 7 TeV

CMS Collaboration
arXiv:1101.3518 [hep-ex].

10.1007/JHEP05(2011)029.
JHEP 1105 (2011) 029.

Search for Supersymmetry in pp Collisions at 7 TeV in Events with Jets and Missing Transverse Energy

CMS Collaboration
arXiv:1101.1628 [hep-ex].
10.1016/j.physletb.2011.03.021.
Phys.Lett. B698 (2011) 196-218.

Search for Heavy Stable Charged Particles in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1101.1645 [hep-ex].
10.1007/JHEP03(2011)024.
JHEP 1103 (2011) 024.

Measurement of the B^+ Production Cross Section in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1101.0131 [hep-ex].
10.1103/PhysRevLett.106.112001.
Phys.Rev.Lett. 106 (2011) 112001.

Search for a heavy gauge boson W' in the final state with an electron and large missing transverse energy in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1012.5945 [hep-ex].
10.1016/j.physletb.2011.02.048.
Phys.Lett. B698 (2011) 21-39.

Upsilon Production Cross-Section in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1012.5545 [hep-ex].
10.1103/PhysRevD.83.112004.
Phys.Rev. D83 (2011) 112004.

Search for Pair Production of First-Generation Scalar Leptoquarks in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1012.4031 [hep-ex].
10.1103/PhysRevLett.106.201802.
Phys.Rev.Lett. 106 (2011) 201802.

Search for Pair Production of Second-Generation Scalar Leptoquarks in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1012.4033 [hep-ex].

10.1103/PhysRevLett.106.201803.
Phys.Rev.Lett. 106 (2011) 201803.

Search for Microscopic Black Hole Signatures at the Large Hadron Collider

CMS Collaboration
arXiv:1012.3375 [hep-ex].
10.1016/j.physletb.2011.02.032.
Phys.Lett. B697 (2011) 434-453.

Measurements of Inclusive W and Z Cross Sections in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1012.2466 [hep-ex].
10.1007/JHEP01(2011)080.
JHEP 1101 (2011) 080.

Measurement of the Isolated Prompt Photon Production Cross Section in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1012.0799 [hep-ex].
10.1103/PhysRevLett.106.082001.
Phys.Rev.Lett. 106 (2011) 082001.

Charged particle multiplicities in pp interactions at $\sqrt{s} = 0.9, 2.36$, and 7 TeV

CMS Collaboration
arXiv:1011.5531 [hep-ex].
10.1007/JHEP01(2011)079.
JHEP 1101 (2011) 079.

Search for Stopped Gluinos in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1011.5861 [hep-ex].
10.1103/PhysRevLett.106.011801.
Phys.Rev.Lett. 106 (2011) 011801.

Prompt and non-prompt J/ψ production in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1011.4193 [hep-ex].
10.1140/epjc/s10052-011-1575-8.
Eur.Phys.J. C71 (2011) 1575.

First Measurement of the Cross Section for Top-Quark Pair Production in Proton-Proton Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration
arXiv:1010.5994 [hep-ex].
10.1016/j.physletb.2010.11.058.
Phys.Lett. B695 (2011) 424-443.

Search for Quark Compositeness with the Dijet Centrality Ratio in pp Collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1010.4439 [hep-ex].

10.1103/PhysRevLett.105.262001.

Phys.Rev.Lett. 105 (2010) 262001.

Search for Dijet Resonances in 7 TeV pp Collisions at CMS

CMS Collaboration

arXiv:1010.0203 [hep-ex].

10.1103/PhysRevLett.105.211801, 10.1103/PhysRevLett.106.029902.

Phys.Rev.Lett. 105 (2010) 211801.

Observation of Long-Range Near-Side Angular Correlations in Proton-Proton Collisions at the LHC

CMS Collaboration

arXiv:1009.4122 [hep-ex].

10.1007/JHEP09(2010)091.

JHEP 1009 (2010) 091.

CMS Tracking Performance Results from early LHC Operation

CMS Collaboration

arXiv:1007.1988 [physics.ins-det].

10.1140/epjc/s10052-010-1491-3.

Eur.Phys.J. C70 (2010) 1165-1192.

First Measurement of the Underlying Event Activity at the LHC with $\sqrt{s} = 0.9$ TeV

CMS Collaboration

arXiv:1006.2083 [hep-ex].

10.1140/epjc/s10052-010-1453-9.

Eur.Phys.J. C70 (2010) 555-572.

Measurement of the charge ratio of atmospheric muons with the CMS detector

CMS Collaboration

arXiv:1005.5332 [hep-ex].

10.1016/j.physletb.2010.07.033.

Phys.Lett. B692 (2010) 83-104.

Measurement of Bose-Einstein correlations with first CMS data

CMS Collaboration

arXiv:1005.3294 [hep-ex].

10.1103/PhysRevLett.105.032001.

Phys.Rev.Lett. 105 (2010) 032001.

Transverse-momentum and pseudorapidity distributions of charged hadrons in pp collisions

at $\sqrt{s} = 7$ TeV

CMS Collaboration

arXiv:1005.3299 [hep-ex].

10.1103/PhysRevLett.105.022002.

Phys.Rev.Lett. 105 (2010) 022002.

Transverse momentum and pseudorapidity distributions of charged hadrons in pp collisions at $\sqrt{s} = 0.9$ and 2.36 TeV

CMS Collaboration

arXiv:1002.0621 [hep-ex].

10.1007/JHEP02(2010)041.

JHEP 1002 (2010) 041.

Commissioning and Performance of the CMS Pixel Tracker with Cosmic Ray Muons

CMS Collaboration

arXiv:0911.5434 [physics.ins-det].

10.1088/1748-0221/5/03/T03007.

JINST 5 (2010) T03007.

Performance of the CMS Level-1 Trigger during Commissioning with Cosmic Ray Muons

CMS Collaboration

arXiv:0911.5422 [physics.ins-det].

10.1088/1748-0221/5/03/T03002.

JINST 5 (2010) T03002.

Measurement of the Muon Stopping Power in Lead Tungstate

CMS Collaboration

arXiv:0911.5397 [physics.ins-det].

10.1088/1748-0221/5/03/P03007.

JINST 5 (2010) P03007.

Commissioning and Performance of the CMS Silicon Strip Tracker with Cosmic Ray Muons

CMS Collaboration

arXiv:0911.4996 [physics.ins-det].

10.1088/1748-0221/5/03/T03008.

JINST 5 (2010) T03008.

Performance of CMS Muon Reconstruction in Cosmic-Ray Events

CMS Collaboration

arXiv:0911.4994 [physics.ins-det].

10.1088/1748-0221/5/03/T03022.

JINST 5 (2010) T03022.

Performance of the CMS Cathode Strip Chambers with Cosmic Rays

CMS Collaboration

arXiv:0911.4992 [physics.ins-det].

10.1088/1748-0221/5/03/T03018.
JINST 5 (2010) T03018.

Performance of the CMS Hadron Calorimeter with Cosmic Ray Muons and LHC Beam Data

CMS Collaboration
arXiv:0911.4991 [physics.ins-det].
10.1088/1748-0221/5/03/T03012.
JINST 5 (2010) T03012.

Fine Synchronization of the CMS Muon Drift-Tube Local Trigger using Cosmic Rays

CMS Collaboration
arXiv:0911.4904 [physics.ins-det].
10.1088/1748-0221/5/03/T03004.
JINST 5 (2010) T03004.

Calibration of the CMS Drift Tube Chambers and Measurement of the Drift Velocity with Cosmic Rays

CMS Collaboration
arXiv:0911.4895 [physics.ins-det].
10.1088/1748-0221/5/03/T03016.
JINST 5 (2010) T03016.

Performance of the CMS Drift-Tube Local Trigger with Cosmic Rays

CMS Collaboration
arXiv:0911.4893 [physics.ins-det].
10.1088/1748-0221/5/03/T03003.
JINST 5 (2010) T03003.

Commissioning of the CMS High-Level Trigger with Cosmic Rays

CMS Collaboration
arXiv:0911.4889 [physics.ins-det].
10.1088/1748-0221/5/03/T03005.
JINST 5 (2010) T03005.

Identification and Filtering of Uncharacteristic Noise in the CMS Hadron Calorimeter

CMS Collaboration
arXiv:0911.4881 [physics.ins-det].
10.1088/1748-0221/5/03/T03014.
JINST 5 (2010) T03014.

Performance of CMS Hadron Calorimeter Timing and Synchronization using Test Beam, Cosmic Ray, and LHC Beam Data

CMS Collaboration
arXiv:0911.4877 [physics.ins-det].
10.1088/1748-0221/5/03/T03013.

JINST 5 (2010) T03013.

Performance of the CMS Drift Tube Chambers with Cosmic Rays

CMS Collaboration

arXiv:0911.4855 [physics.ins-det].

10.1088/1748-0221/5/03/T03015.

JINST 5 (2010) T03015.

Commissioning of the CMS Experiment and the Cosmic Run at Four Tesla

CMS Collaboration

arXiv:0911.4845 [physics.ins-det].

10.1088/1748-0221/5/03/T03001.

JINST 5 (2010) T03001.

CMS Data Processing Workflows during an Extended Cosmic Ray Run

CMS Collaboration

arXiv:0911.4842 [physics.ins-det].

10.1088/1748-0221/5/03/T03006.

JINST 5 (2010) T03006.

Aligning the CMS Muon Chambers with the Muon Alignment System during an Extended Cosmic Ray Run

CMS Collaboration

arXiv:0911.4770 [physics.ins-det].

10.1088/1748-0221/5/03/T03019.

JINST 5 (2010) T03019.

Performance Study of the CMS Barrel Resistive Plate Chambers with Cosmic Rays

CMS Collaboration

arXiv:0911.4045 [physics.ins-det].

10.1088/1748-0221/5/03/T03017.

JINST 5 (2010) T03017.

Time Reconstruction and Performance of the CMS Electromagnetic Calorimeter

CMS Collaboration

arXiv:0911.4044 [physics.ins-det].

10.1088/1748-0221/5/03/T03011.

JINST 5 (2010) T03011.

Alignment of the CMS Muon System with Cosmic-Ray and Beam-Halo Muons

CMS Collaboration

arXiv:0911.4022 [physics.ins-det].

10.1088/1748-0221/5/03/T03020.

JINST 5 (2010) T03020.

Precise Mapping of the Magnetic Field in the CMS Barrel Yoke using Cosmic Rays

CMS Collaboration
arXiv:0910.5530 [physics.ins-det].
10.1088/1748-0221/5/03/T03021.
JINST 5 (2010) T03021.

Performance and Operation of the CMS Electromagnetic Calorimeter

CMS Collaboration
arXiv:0910.3423 [physics.ins-det].
10.1088/1748-0221/5/03/T03010.
JINST 5 (2010) T03010.

Alignment of the CMS Silicon Tracker during Commissioning with Cosmic Rays

CMS Collaboration
arXiv:0910.2505 [physics.ins-det].
10.1088/1748-0221/5/03/T03009.
JINST 5 (2010) T03009.

The CMS experiment at the CERN LHC

CMS Collaboration
10.1088/1748-0221/3/08/S08004.
JINST 3 (2008) S08004.

Conference proceedings

Run-1 Single-top measurements at CMS, *Rebeca Gonzalez Suarez*, Proceedings DPF 2015, arXiv:1510.05235

Inclusive single top cross section at the LHC, *Rebeca Gonzalez Suarez on behalf of the CMS and ATLAS collaborations*, Proceedings TOP 2013, DOI:10.3204/DESY-PROC-2014-02/16

Single top Production at $\sqrt{s} = 7$ TeV, *Rebeca Gonzalez Suarez on behalf of the CMS, ATLAS collaborations*, Proceedings Moriond 2012, arXiv:1205.2786

Higgs search prospects at the LHC, *Rebeca Gonzalez Suarez*, Proceedings BEACH 2010, Nucl.Phys.Proc.Suppl. 210-211 (2011) 283-288

Discovery Potential for the SM Higgs Boson in the $H \rightarrow WW^* \rightarrow 2l2\nu$ channel at LHC, *Rebeca Gonzalez Suarez*, Proceedings ICHEP 2008, arXiv:0810.1468

A Software and Computing prototype for CMS Muon System alignment, (*Iban Cabrillo, Isidro Gonzalez Caballero, Rebeca Gonzalez Suarez...*), Proceedings CHEP 2007, Journal of Physics: Conference Series 119 (2008) 072008

Public Analysis Summaries

CMS Public Analysis Summaries in which I had a relevant contribution in reverse chronological order. This kind of document is reviewed by a board of four referees and circulated to the Collaboration before being made public:

‘Search for Higgs boson pair production in the $b\bar{b}l\nu l\nu$ final state at $\sqrt{s} = 13$ TeV’ - HIG-16-024 - [R - Higgs to WW]

‘Search for high mass Higgs to WW with fully leptonic decays using 2015 data’ - HIG-16-023 [R - Higgs to WW]

‘Search for associated production of Higgs bosons and top quarks in multilepton final states at $\sqrt{s} = 13$ TeV’ - HIG-16-022 [R - Higgs to WW]

‘Search for associated production of a Z boson with a single top quark and for tZ flavour-changing interactions in pp collisions at $\sqrt{s} = 8$ TeV’ - TOP-12-039 [R - Single top]

‘Measurement of the top quark mass in the dileptonic $t\bar{t}$ decay channel using the Mbl, MT2, and MAOS Mblv observables’ - TOP-15-008 [R-ARC] [Chair of the review]

‘First results on Higgs to WW at $\sqrt{s} = 13$ TeV’ - HIG-15-003 [ED- HWW]

‘Combination of cross-section measurements of associated production of a single top quark and a W boson at $\sqrt{s} = 8$ TeV with the ATLAS and CMS experiments’ - TOP-15-019 [C]

‘Search for resonant Higgs boson pair production in the $b\bar{b}l\nu l\nu$ final state at $\sqrt{s} = 13$ TeV’ - HIG-16-011 [R - Higgs to WW]

‘Search for $t\bar{t}H$ production in multilepton final states at $\sqrt{s} = 13$ TeV’ - HIG-15-008 [C, R - HWW]

‘Measurement of the top quark mass from single-top production events’ - TOP-15-001 [R-ARC] [Chair of the review]

‘Measurement of the transverse momentum spectrum of the Higgs boson produced in pp collisions at $\sqrt{s} = 8$ TeV using the $H \rightarrow WW$ decays’ (CMS-PAS-HIG-15-010) [R - Higgs to WW]

‘Measurement of the top-quark mass from the b jet energy spectrum’ (CMS-PAS-TOP-15-002) [R-ARC] [Chair of the review]

‘Measurements of the Higgs boson production and decay rates and constraints on its couplings from a combined ATLAS and CMS analysis of the LHC pp collision data at $\sqrt{s} = 7$ and 8 TeV’ (CMS-PAS-HIG-15-002) [C]

‘Measurement of the W boson helicity using $t\bar{t}$ events in the dilepton final state at $\sqrt{s} = 8$ TeV’ CMS-PAS-TOP-14-017 [R-ARC] [Chair of the review]

'Measurements of the differential cross section of single top-quark production in the t channel in proton-proton collisions at $\sqrt{s} = 8\text{TeV}$ ' (CMS-PAS-TOP-14-004) [R - Single top]

'Search for $H \rightarrow b\bar{b}$ in association with single top quarks as a test of Higgs boson couplings' (CMS-PAS-HIG-14-015) [C]

'Combination of cross-section measurements of associated production of a single top-quark and a W boson at $\sqrt{s} = 8\text{ TeV}$ with the ATLAS and CMS experiments' (CMS-PAS-TOP-14-009) [C, R - Single top]

'Constraints on Anomalous HWW Interactions using Higgs boson decays to $W+W^-$ in the fully leptonic final state' (CMS-PAS-HIG-14-012) [PA, ED]

'Constraints on anomalous HVV interactions using H to $4l$ decays' (CMS-PAS-HIG-14-014) [C]

'Search for $t\bar{t}H$ events in the $H \rightarrow b\bar{b}$ final state using the Matrix Element Method' (CMS-PAS-HIG-14-010) [R-ARC]

'Search for anomalous Wtb couplings and top FCNC in t-channel single-top-quark events' (CMS-PAS-TOP-14-007) [R - Single top]

'Search for anomalous single top quark production in association with a photon' (CMS-PAS-TOP-14-003) [R - Single top]

'Search for new physics with monotop final states in pp collisions at $\sqrt{s} = 8\text{ TeV}$ ' (CMS-PAS-B2G-12-022) [R-ARC] [Chair of the review]

'Search for associated production of a single top quark and a Higgs boson in events where the Higgs boson decays to two photons at $\sqrt{s} = 8\text{ TeV}$ ' (CMS-PAS-HIG-14-001) [R-ARC]

'Projections for Top FCNC Searches in 3000fb^{-1} at the LHC' (CMS-PAS-FTR-13-016) [R-ARC]

'Sensitivity study of the prospects for searching for heavy vector-like charge $2/3$ quarks at $\sqrt{s} = 14\text{ TeV}$ with the upgraded CMS detector' (CMS-PAS-FTR-13-026) [R-ARC]

'Projected improvement of the accuracy of top-quark mass measurements at the upgraded LHC' (CMS-PAS-FTR-13-017) [R-ARC]

'CMS reach in $B_s^0 \rightarrow \mu^+\mu^-$ and $B^0 \rightarrow \mu^+\mu^-$ branching fractions for the new LHC runs' (CMS-PAS-FTR-13-022) [R-ARC]

'Search for s-channel single top-quark production in pp collisions at $\sqrt{s} = 8\text{TeV}$ ' (CMS-PAS-TOP-13-009) [R - Single top]

'Measurement of top quark polarization in t-channel single-top production' (CMS-PAS-TOP-13-001)

[R - Single top]

‘Combination of single top-quark cross-sections measurements in the t-channel at $\sqrt{s} = 8\text{TeV}$ with the ATLAS and CMS experiments’ (CMS-PAS-TOP-12-002) [R - Single top]

‘Search for electroweak production of charginos and neutralinos using leptonic final states’ (CMS-PAS-SUS-13-006) [R-ARC]

‘Observation of Associated Production of a Single Top Quark and W Boson in pp Collisions at $\sqrt{s} = 8\text{TeV}$ ’ (CMS-PAS-TOP-12-040) [PA]

‘Search for Flavor-Changing Neutral Currents in tZ events in proton-proton collisions at $\sqrt{s} = 7\text{TeV}$ ’ (CMS-PAS-TOP-12-021) [R - Single top]

‘Search for electroweak production of charginos, neutralinos and sleptons using leptonic final states in pp collisions at $\sqrt{s} = 8\text{TeV}$ ’ (CMS-PAS-SUS-12-022) [R-ARC]

‘Measurement of the single-top t-channel charge ratio at 8 TeV’ (CMS-PAS-TOP-12-038) [R - Single top]

‘Measurement of W-helicity fractions in single top events topology’ (CMS-PAS-TOP-12-020) [R - Single top]

‘Search for single top tW associated production in the dilepton decay channel in pp collisions at $\sqrt{s} = 7\text{TeV}$ ’ (CMS-PAS-TOP-11-022) [PA, ED]

‘Search for Physics Beyond the Standard Model in Z+MET+Jets events at the LHC’ (CMS-PAS-SUS-11-019) [R-ARC]

‘Measurement of the top-quark pair-production cross section in the lepton+jets channel with the use of b-tagging’ (CMS-PAS-TOP-10-003) [C]

‘Measurement of the top-quark pair-production cross section in the di-lepton channel at 7 TeV’ (CMS-PAS-TOP-10-005) [C]

‘Search for $H \rightarrow WW \rightarrow 2l 2\nu$ ’ (CMS-PAS-HIG-10-003) [C]

‘Observation of WW final state’ (CMS-PAS-EWK-009) [C]

‘Performance of muon identification in pp collisions at $\sqrt{s} = 7\text{TeV}$ ’ (CMS-PAS-MUO-10-002) [PA]

‘Search Strategy for a Standard Model Higgs Boson Decaying to Two W Bosons in the Fully Leptonic Final State’ (CMS-PAS-HIG-08-006) [PA]

‘Search for the Higgs boson in the WW decay channel with the CMS experiment’ (CMS-PAS-HIG-07-001) [PA]

Public top results

Public analysis summaries made public during my convenership of the top quark physics analysis group in CMS, in reverse chronological order:

'Bounding the top quark width using final states with two charged leptons and two jets at $\sqrt{s} = 13$ TeV' (TOP-16-019)

'Measurement of the $t\bar{t} + \gamma$ production cross-section in pp collisions at $\sqrt{s} = 8$ TeV' (TOP-14-008)

'Measurement of the jet mass distribution in boosted $t\bar{t}$ production at $\sqrt{s} = 8$ TeV' (TOP-15-015)

Internal Analysis Notes

Internal notes that I am an author of in reverse chronological order:

CMS AN-2015/300 - 'Higgs Boson decaying to WW in the leptonic final state at 13 TeV' (*HWW team*) [ED]

CMS AN-2015/299 - 'Common analysis object definitions and triggers efficiencies for the H→WW Run-2 analysis' (*HWW team*) [ED]

CMS AN-2015/321 - 'Search for ttH in multilepton final states at 13 TeV' (*Anne-Catherine Le Bihan et al.*) [C]

CMS AN-2013/113 - 'Search for H→bb in association with single top quarks as a test of Higgs boson couplings' (*A. Anuar, A. Bean et al.*) [C]

CMS AN-2014/083 - 'Spin Parity of the Higgs Boson and Tensor Structure of the HWW interaction in the H→WW dileptonic decay channel' (*Rebeca Gonzalez Suarez et al.*) [PA-ED]

CMS AN-2013/096 - 'Study of associated Higgs boson (ZH) production in the three leptons, two jets final state at 7 and 8 TeV' (*Rebeca Gonzalez Suarez et al.*) [PA-ED]

CMS AN-2012/458 - 'Single top associated tW production at 8 TeV' (*Rebeca Gonzalez Suarez et al.*) [PA-ED]

CMS AN-2012/060 - 'Search for single top tW production using a boosted decision tree method in the dilepton channel' (*Rebeca Gonzalez Suarez et al.*) [C]

CMS AN-2011/465 - 'Search for the Single top tW associated production in the dilepton decay channel with the full 2011 dataset' (*Rebeca Gonzalez Suarez et al.*) [PA-ED]

CMS AN-2011/253 - 'Search for the Single top tW associated production in the dilepton decay channel' (*Rebeca Gonzalez Suarez et al.*) [PA-ED]

CMS AN2010/281 - 'A measurement of $t\bar{t}$ cross section in early 7 TeV data using the semileptonic topology: electron plus jets with one or more b-tags, using 36 pb^{-1} of CMS data.' (*M. Barrett, F. Blekman et al.*) [C-ED]

CMS AN2010/411 - 'Search for Higgs Boson Decays to Two W Bosons in the Fully Leptonic Final State at $\sqrt{s} = 7$ TeV' (*G. Bauer, J. Bendavid et al.*) [C]

CMS AN2010/344 - 'First Measurement of $pp \rightarrow WW$ Production Cross-Section at $\sqrt{s} = 7$ TeV' (*W. Andrews, D. Barge et al.*) [C]

CMS AN2010/406 - 'Measurement of the $t\bar{t}$ cross section in the dilepton final state using b-tagging at $\sqrt{s} = 7$ TeV' (*J. Brochero, A. Calderón et al.*) [C-ED]

CMS AN 2010/008 - 'The CMS physics reach for searches at 7 TeV' (*CMS Collaboration*) [PA]

CMS AN 2009/139 - 'Search Strategy for a Standard Model Higgs Boson Decaying to Two W Bosons in the Fully Leptonic Final State at $\sqrt{s} = 10$ TeV' (*G. Bauer, J. Bendavid et al.*)

CMS AN-2009/185 - 'Analysis strategy for the measurement of the $WW \rightarrow \mu\nu\mu\nu$ cross-section with 200 pb^{-1} at center of mass energy of 10 TeV' (*C.Jorda, R. Villar et al.*) [C]

CMS AN-2009/025 - 'Analysis strategy for the measurement of the $WW \rightarrow \mu\nu\mu\nu$ cross-section' (*C.Jorda, R. Villar et al.*) [C]

CMS AN-2009/020 - 'Projected exclusion limits on the SM Higgs boson cross sections obtained by combining the $H \rightarrow WW$ and ZZ decay channels' (*S. Baffioni, C. Botta et al.*) [PA]

CMS AN-2008/074 - 'Measurement of muon charge asymmetry in the $W \rightarrow \mu\nu$ channel' (*J. Alcaraz, M.I. Josa et al.*) [C]

CMS AN-2008/039 - 'Search Strategy for a Standard Model Higgs Boson Decaying to Two W Bosons in the Fully Leptonic Final State' (*C. Charlot, J. Cuevas et al.*) [PA]

CMS AN-2007/037 - 'Search for the Higgs boson in the WW decay channel with the CMS experiment' (*C. Charlot, J. Cuevas et al.*) [PA]

November 16, 2016