

# Rebeca Gonzalez Suarez - Publication List

## Contents

Metrics, 1 • Main publications in peer-reviewed journals, 2 • Publications from top, 4 • Other, 5 • Conference proceedings, 80 • Public Analysis Summaries, 81 • Public top results, 84 • Internal Analysis Notes, 85.

## Metrics

As of October 27, 2016:

	Citeable papers	Published only
Number of papers	582	530
Number of citations	53122	52910
Average citations per paper	91.3	99.8
h index	111	111

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)	157	156
Known papers (10-49)	198	196
Less known papers (1-9)	72	45
Unknown papers (0)	25	3

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]

**500<sup>th</sup> 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 [152](#) (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

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

**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:

**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  $\alpha_T$  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-tbar production using the matrix element method in the muon+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-bbar 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  $\tau$  lepton decays to hadrons and  $\nu_\tau$  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  $\tau$  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  $t\bar{t}$  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  $W' \rightarrow t\bar{b}$  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

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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

CMS Collaboration

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CMS Collaboration

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

CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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

CMS Collaboration

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

CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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**Measurement of the Z boson differential cross section in transverse momentum and rapidity in proton proton collisions at 8 TeV**

CMS Collaboration

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CMS Collaboration

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**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  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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**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  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS and LHCb Collaborations  
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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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

CMS Collaboration  
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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  $\tau$  lepton**

CMS Collaboration  
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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  
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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  
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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  
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**Observation of the diphoton decay of the Higgs boson and measurement of its properties**

CMS Collaboration

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

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CMS Collaboration

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**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

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Phys.Lett. B741 (2015) 12.

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CMS Collaboration

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

CMS Collaboration

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

CMS Collaboration

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**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

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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

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Phys.Lett. B740 (2015) 250.

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CMS Collaboration

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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

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Eur.Phys.J. C74 (2014) 11, 3129.

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

CMS Collaboration

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JINST 9 (2014) 10, P10009.

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

CMS Collaboration

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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

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CMS Collaboration

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CMS Collaboration

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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

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**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

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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

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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

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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



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Phys.Lett. B736 (2014) 33.

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CMS Collaboration  
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CMS Collaboration  
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**Alignment of the CMS tracker with LHC and cosmic ray data**

CMS Collaboration  
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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  
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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  
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JHEP 1404 (2014) 191.

**Search for  $W' \rightarrow tb$  decays in the lepton + jets final state in pp collisions at  $\sqrt{s} = 8$  TeV**

CMS Collaboration  
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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

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

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CMS Collaboration

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Nature Phys. 10 (2014) 557-560.

**Evidence for the 125 GeV Higgs boson decaying to a pair of  $\tau$  leptons**

CMS Collaboration

arXiv:1401.5041 [hep-ex].

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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

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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.

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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].

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Phys.Lett. B735 (2014) 204.

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

CMS Collaboration

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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

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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

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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

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JHEP 1403 (2014) 032.

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

CMS Collaboration

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

CMS Collaboration

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

CMS Collaboration

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

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

CMS Collaboration

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

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

CMS Collaboration

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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

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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].

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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

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

CMS Collaboration  
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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  
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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  
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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  $\gamma$  + 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

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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  $J/\psi$  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].  
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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  $\Lambda_b^0$  lifetime in pp collisions at  $\sqrt{s} = 7$  TeV**

CMS Collaboration

arXiv:1304.7495 [hep-ex].

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JHEP 1307 (2013) 163.

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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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

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

CMS Collaboration

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

CMS Collaboration

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

CMS Collaboration

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

CMS Collaboration

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CMS Collaboration

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**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

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

CMS Collaboration

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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

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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration

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

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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Phys.Rev. D87 (2013) 11, 112002.

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CMS Collaboration

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CMS Collaboration  
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Phys.Rev.Lett. 111 (2013) 8, 081802.

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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration

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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
arXiv:1211.3338 [hep-ex].  
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**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  
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Phys.Rev. D87 (2013) 5, 052006.

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

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



CMS Collaboration  
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**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  $\alpha_T$**

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

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

CMS Collaboration  
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**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].  
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JHEP 1301 (2013) 154.

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

CMS Collaboration  
arXiv:1210.6718 [hep-ex].  
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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].  
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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].

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JHEP 1212 (2012) 055.

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

CMS Collaboration

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

CMS Collaboration

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

CMS Collaboration

arXiv:1210.2422 [hep-ex].

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**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].

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**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

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JHEP 1301 (2013) 013.

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

CMS Collaboration

arXiv:1210.2311 [hep-ex].

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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

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

CMS Collaboration

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

CMS Collaboration

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

CMS Collaboration

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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].

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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].

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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].

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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

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

CMS Collaboration

arXiv:1209.2922 [hep-ex].

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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

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**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

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JHEP 1212 (2012) 105.

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

CMS Collaboration

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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

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JHEP 1211 (2012) 080.

**Combined search for the quarks of a sequential fourth generation**

CMS Collaboration

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

CMS Collaboration  
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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].  
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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].  
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Phys.Lett. B718 (2012) 329-347.

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CMS Collaboration  
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**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  
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**Search for flavor changing neutral currents in top quark decays in  $pp$  collisions at 7 TeV**

CMS Collaboration

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

CMS Collaboration

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CMS Collaboration

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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

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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].

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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

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

CMS Collaboration  
arXiv:1207.2666 [hep-ex].  
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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].  
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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  $MT_2$  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].  
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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  
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**Search for charge-asymmetric production of  $W'$  bosons in top pair + jet events from  $pp$  collisions at  $\sqrt{s} = 7$  TeV**

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



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

CMS Collaboration

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

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

CMS Collaboration

arXiv:1206.1725 [hep-ex].

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

**Search for a  $W'$  or Techni- $\rho$  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

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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].

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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

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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

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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

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

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

CMS Collaboration

arXiv:1205.0594 [hep-ex].

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Phys.Lett. B714 (2012) 136-157.

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

CMS Collaboration

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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

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Phys.Lett. B718 (2013) 773-794.

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CMS Collaboration

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**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  $W^\pm$  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

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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

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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].

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JHEP 1205 (2012) 123.

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

CMS Collaboration

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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

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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  $\tau$**

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].

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Phys.Lett. B716 (2012) 103-121.

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

CMS Collaboration

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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  
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JHEP 1206 (2012) 110.

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

CMS Collaboration  
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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  
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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].  
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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  
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**Search for neutral Higgs bosons decaying to  $\tau$  pairs in  $pp$  collisions at  $\sqrt{s} = 7$  TeV**

CMS Collaboration  
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CMS Collaboration

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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

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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

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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

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Eur.Phys.J. C72 (2012) 1945.

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CMS Collaboration

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Phys.Rev.Lett. 108 (2012) 111804.

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CMS Collaboration

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CMS Collaboration  
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**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  
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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  
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JHEP 1206 (2012) 036.

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

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

CMS Collaboration

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

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CMS Collaboration

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10.1007/JHEP01(2012)052.

JHEP 1201 (2012) 052.

**$J/\psi$  and  $\psi_{2S}$  production in  $pp$  collisions at  $\sqrt{s} = 7$  TeV**

CMS Collaboration

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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

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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

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Phys.Rev. D85 (2012) 032002.

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CMS Collaboration

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JHEP 1201 (2012) 010.

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

CMS Collaboration

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

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

CMS Collaboration  
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CMS Collaboration

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

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

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

CMS Collaboration  
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#### **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  
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#### **Determination of Jet Energy Calibration and Transverse Momentum Resolution in CMS**

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

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

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

CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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**Missing transverse energy performance of the CMS detector**

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

CMS Collaboration  
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JHEP 1108 (2011) 155.

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

CMS Collaboration  
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10.1103/PhysRevD.84.052008.  
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**Search for Supersymmetry in Events with b Jets and Missing Transverse Momentum at the LHC**

CMS Collaboration  
arXiv:1106.3272 [hep-ex].  
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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].  
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Phys.Rev.Lett. 107 (2011) 091802.

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

CMS Collaboration  
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**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  
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JHEP 1108 (2011) 005.

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

CMS Collaboration  
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**Measurement of the Ratio of the 3-jet to 2-jet Cross Sections in  $pp$  Collisions at  $\sqrt{s} = 7$  TeV**

CMS Collaboration  
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Phys.Lett. B702 (2011) 336-354.

**Measurement of the Inclusive Jet Cross Section in  $pp$  Collisions at  $\sqrt{s} = 7$  TeV**

CMS Collaboration  
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**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  
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**Search for First Generation Scalar Leptoquarks in the  $e\nu jj$  channel in  $pp$  collisions at  $\sqrt{s} = 7$  TeV**

CMS Collaboration  
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**Indications of suppression of excited  $\Upsilon$  states in PbPb collisions at  $\sqrt{S_{NN}} = 2.76$  TeV**

CMS Collaboration  
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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  
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JHEP 1106 (2011) 093.

**Measurement of  $W\gamma$  and  $Z\gamma$  production in  $pp$  collisions at  $\sqrt{s} = 7$  TeV**

CMS Collaboration  
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Phys.Lett. B701 (2011) 535-555.

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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration  
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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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JINST 5 (2010) T03006.

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CMS Collaboration

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CMS Collaboration  
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CMS Collaboration  
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### **Alignment of the CMS Muon System with Cosmic-Ray and Beam-Halo Muons**

CMS Collaboration  
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### **Precise Mapping of the Magnetic Field in the CMS Barrel Yoke using Cosmic Rays**

CMS Collaboration  
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### **Performance and Operation of the CMS Electromagnetic Calorimeter**

CMS Collaboration  
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CMS Collaboration  
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## 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  $3000\text{fb}^{-1}$  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]

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