Rebeca Gonzalez Suarez - Publication List

Contents

Metrics, $1 \bullet$ Main publications in peer-reviewed journals, $2 \bullet$ Publications from top, $4 \bullet$ Other, $6 \bullet$ Conference proceedings, $81 \bullet$ Public Analysis Summaries, $82 \bullet$ Public top results, $85 \bullet$ Internal Analysis Notes, $87 \bullet$.

Metrics

As of July 26, 2019:

	Citeable papers	Published only
Number of papers	910	865
Number of citations	89816	89472
Average citations per paper	98.7	103.4
hHEP index	138	138

Breakdown of papers by citations:

	Citeable papers	Published only
Renowned papers (500+)	17	17
Famous papers (250-499)	39	39
Very well-known papers (100-249)	162	161
Well-known papers (50-99)	222	221
Known papers (10-49)	342	338
Less known papers (1-9)	103	81
Unknown papers (0)	25	8

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 are highlighted.

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 \star sign.

To catch a long-lived particle: hit selection towards a regional hardware track trigger implementation, Mikael Mårtensson, Max Isacson, Hampus Hahne, Rebeca Gonzalez Suarez, Richard Brenner, arXiv:1907.09846 Submitted to JINST [PA, ED]

Recent CMS results in top and Higgs physics, Rebeca Gonzalez Suarez, arXiv:1707.05054, Modern Physics Letters A, 2, Vol. 32, No. 29 (2017) 1730026 [PA, ED]

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, arXiv:1606.01522, JHEP 03 (2017) 032 [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, arXiv:1605.09047, Phys. Lett. B 762 (2016) 512 [R - ARC]

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, ATLAS and CMS Collaborations, arXiv:1606.02266, JHEP 1608 (2016) 045. [C]

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*, arXiv:1605.02329, JHEP 09 (2016) 051 [R - Higgs to WW] 500th paper of CMS

Search for s channel single top quark production in pp collisions at \sqrt{s} =7 and 8 TeV, CMS Collaboration, 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, arXiv:1511.03951, JHEP 04 (2016) 035 [R - Single Top]

Measurement of top quark polarisation in t-channel single top quark production, *CMS Collaboration*, 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, arXiv:1509.08159, JHEP06(2016)177 [C, R-ARC] Cited by 33.

Measurement of the Charge Asymmetry in Top Quark Pair Production in pp Collisions at $\sqrt{s}=8$ TeV using a Template Method, CMS Collaboration, 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*, 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, 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 proton collisions at 7 and 8 TeV, CMS Collaboration, arXiv:1411.3441, Phys. Rev. D 92, 012004 (2015) [PA, ED] Cited by 343 (250+).

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

- * Search for monotop signatures in proton-proton collisions at $\sqrt{s} = 8$ TeV, CMS Collaboration, arXiv:1410.1149, Phys. Rev. Lett. 114, 101801 (2015) [R Chair of the Review] Cited by <u>62</u> (50+).
- * Observation of the associated production of a single top quark and a W boson in pp collisions at $\sqrt{s}=8$ TeV, CMS Collaboration, arXiv:1401.2942, Phys. Rev. Lett. 112, 231802. [PA] Cited by 166 (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, 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, 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, arXiv:1312.1129, JHEP 01(2014)096 [PA] Cited by 365 (250+).

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

Observation of a new boson with mass near 125 GeV in pp collisions at $\sqrt{s}=7$ and 8 TeV, CMS Collaboration, arXiv:1303.4571, JHEP 1306 (2013) 081 [C]

* Evidence for associated production of a single top quark and W boson in pp collisions at 7 TeV, CMS Collaboration, arXiv:1209.3489, Phys. Rev. Lett. 110, 022003 (2013) [PA, ED] Cited by 147 (100+).

Search for electroweak production of charginos and neutralinos using leptonic final states in pp collisions at $\sqrt(s)=7$ TeV, CMS Collaboration,arXiv:1209.6620, JHEP 1211 (2012) 147 [R-ARC]

* Observation of a new boson at a mass of 125 GeV with the CMS experiment at the LHC, CMS Collaboration, arXiv:1207.7235, Phys.Lett. B716 (2012) 30-61 [C] Cited by 8561 (1000+).

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, arXiv:1204.3774, Physics Letters B 716 (2012) 260-284 [R-ARC]

- \star 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, arXiv:1202.1489, Phys.Lett. B 710 (2012) 91-113 [C] Cited by 174 (100+).
- * 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, arXiv:1108.3773, Phys.Rev. D84 (2011) 092004 [C] Cited by $\underline{\mathbf{134}}$ (100+).
- * Measurement of W^+W^- Production and Search for the Higgs Boson in pp Collisions at $\sqrt{s}=7$ TeV, CMS Collaboration, arXiv:1102.5429, Phys.Lett. B 699 (2011) 25-47 [C] Cited by 173 (100+).

Publications from top

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

Search for new physics in top quark production in dilepton final states in proton-proton collisions at \sqrt{s} = 13 TeVs *CMS Collaboration*, submitted to EPJC, arXiv:1903.11144

Combinations of single-top-quark production cross-section measurements and $|f_{LV}V_{tb}|$ determinations at $\sqrt{s}=7$ and 8 TeV with the ATLAS and CMS experiments ATLAS and CMS Collaborations, submitted to JHEP, arXiv:1902.07158

Measurement of the single top quark and antiquark production cross sections in the t channel and their ratio in proton-proton collisions at $\sqrt{s} = 13$ TeV CMS Collaboration, Submitted to Phys. Lett. B, arXiv:1812.10514

Measurement of the top quark mass in the all-jets final state at $\sqrt{s}=13$ TeV and combination with the lepton+jets channel CMS Collaboration, Eur. Phys. J. C 79 (2019) 313, arXiv:1812.10534

Measurement of the $t\bar{t}$ production cross section, the top quark mass, and the strong coupling constant using dilepton events in pp collisions at $\sqrt{s}=$ 13 TeV $\it CMS$ $\it Collaboration$, Eur. Phys. J. C 79 (2019) 368, arXiv:1812.10505

Measurements of $t\bar{t}$ differential cross sections in proton-proton collisions at $\sqrt{s}=$ 13 TeV using events containing two leptons CMS Collaboration, JHEP 02 (2019) 149, arXiv:1811.06625

Measurement of jet substructure observables in $t\bar{t}$ events from proton-proton collisions at $\sqrt{s}=13$ TeV CMS Collaboration, Phys. Rev. D 98, 092014 (2018), arXiv:1808.073403

Evidence for the associated production of a single top quark and a photon in proton-proton collisions at $\sqrt{s}=13$ TeV CMS Collaboration, Phys. Rev. Lett. 121, 221802 (2018), arXiv:1808.02913

Study of the underlying event in top quark pair production in pp collisions at 13 TeV CMS Collaboration, Eur. Phys. J. C 79 (2019) 123 arXiv:1807.02810

Measurement of the production cross section for single top quarks in association with W bosons in proton-proton collisions at $\sqrt{s}=13$ TeV CMS Collaboration, JHEP 10 (2018) 117, arXiv:1805.07399

Measurement of the top quark mass with lepton+jets final states using pp collisions at $\sqrt{s}=13$ TeV CMS Collaboration, Eur. Phys. J. C 78 (2018) 891, arXiv:1805.01428

Measurement of differential cross sections for the production of top quark pairs and of additional jets in lepton+jets events from pp collisions at $\sqrt{s}=13$ TeV $\it CMS$ $\it Collaboration$, Phys. Rev. D 97, 112003 (2018), arXiv:1803.08856

Measurements of differential cross sections of top quark pair production as a function of kinematic event variables in proton-proton collisions at $\sqrt{s}=13$ TeV CMS Collaboration, JHEP 06 (2018) 002, arXiv:1803.03991

Measurement of the associated production of a single top quark and a Z boson in pp collisions at $\sqrt{s}=13$ TeV CMS Collaboration, Phys.Lett. B779 (2018) 358-384, arXiv:1712.02825

Search for the flavor-changing neutral current interactions of the top quark and the Higgs boson which decays into a pair of b quarks at $\sqrt{s}=13$ TeV CMS Collaboration, JHEP 06 (2018) 102, arXiv:1712.02399

Measurement of the inclusive $t\bar{t}$ cross section in pp collisions at $\sqrt{s}=5.02$ TeV using final states with at least one charged lepton CMS Collaboration, JHEP 03 (2018) 115, arXiv:1711.03143

Measurement of the cross section for top quark pair production in association with a W or Z boson in proton-proton collisions at $\sqrt{s}=13$ TeV $\it CMS$ $\it Collaboration$, JHEP 08 (2018) 011, arXiv:1711.02547

Search for standard model production of four top quarks with same-sign and multilepton final states in proton-proton collisions at $\sqrt{s}=13$ TeV CMS Collaboration, Eur. Phys. J. C (2018) 78: 140, arXiv:1710.10614

Combination of inclusive and differential $t\bar{t}$ charge asymmetry measurements using ATLAS and CMS data at $\sqrt{s}=7$ and 8 TeV CMS and ATLAS Collaborations, JHEP 04 (2018) 033, arXiv:1709.05327

Measurement of normalized differential $t\bar{t}$ cross sections in the dilepton channel from pp collisions at $\sqrt{s}=13$ TeV CMS Collaboration, JHEP 04 (2018) 060, arXiv:1708.07638

Measurement of the semileptonic $t\bar{t}+\gamma$ production cross section in pp collisions at $\sqrt{s}=8$ TeV CMS Collaboration, JHEP 10 (2017) 006, arXiv:1706.08128

Measurements of $t\bar{t}$ cross sections in association with b jets and inclusive jets and their ratio using dilepton final states in pp collisions at \sqrt{s} = 13 TeV *CMS Collaboration*, Phys. Lett. B 776 (2017) 355, arXiv:1705.10141

Measurement of the top quark mass in the dileptonic $t\bar{t}$ decay channel using the mass observables M_{bl} , M_{T2} , and M_{lb} in pp collisions at $\sqrt{s}=$ 8 TeV CMS Collaboration, Phys. Rev. D 96 (2017) 032002, arXiv:1704.06142

Measurement of the jet mass in highly boosted $t\bar{t}$ events from pp collisions at $\sqrt{s}=$ 8 TeV CMS Collaboration, Eur. Phys. J. C 77 (2017) 467, arXiv:1703.06330

Measurement of the top quark mass using single top quark events in proton-proton collisions at \sqrt{s} = 8 TeV *CMS Collaboration*, EPJC 77 (2017) 354, arXiv:1703.02530

Measurement of double-differential cross sections for top quark pair production in pp collisions at \sqrt{s} = 8 TeV and impact on parton distribution functions *CMS Collaboration*, EPJC 77 (2017) 459, arXiv:1703.01630

Search for standard model production of four top quarks in proton-proton collisions at \sqrt{s} = 13 TeV, CMS Collaboration, Phys. Lett. B 772 (2017) 336, arXiv:1702.06164

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, CMS Collaboration, JHEP 07 (2017) 003, arXiv:1702.01404

Measurement of the $t\bar{t}$ production cross section using events with one lepton and at least one jet in pp collisions at \sqrt{s} =13 TeV, CMS Collaboration, JHEP 09 (2017) 051, arXiv:1701.06228

Search for CP violation in $t\bar{t}$ production and decay in proton-proton collisions at $\sqrt{s}=$ 8 TeV, CMS Collaboration, JHEP 03 (2017) 101, arXiv:1611.08931

Measurement of the $t\bar{t}$ production cross section using events in the $e\mu$ final state in pp collisions at $\sqrt{s}=13$ TeV, CMS Collaboration, EPJC 77 (2017) 172, arXiv:1611.04040

Measurement of the mass difference between top quark and antiquark in pp collisions at $\sqrt{s}=8$ TeV , CMS Collaboration, Phys. Lett. B 770 (2017) 50, arXiv:1610.09551

Search for top quark decays via Higgs-boson-mediated flavor-changing neutral currents in pp collisions at $\sqrt{s}=8$ TeV, CMS Collaboration, JHEP 02 (2017) 079, 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, Phys. Rev. D 95, 092001 (2017), arXiv:1610.04191

Cross section measurement of t-channel single top quark production in pp collisions at $\sqrt{s}=13$ TeV, CMS Collaboration, Phys. Lett. B 772 (2017) 752, arXiv:1610.00678

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

Search for anomalous triple gauge couplings in WW and WZ production in lepton + jet events in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration arXiv:1907.08354 [hep-ex].

Measurement of differential cross sections and charge ratios for t-channel single top quark production in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration arXiv:1907.08330 [hep-ex].

Measurements of triple-differential cross sections for inclusive isolated-photon+jet events in pp collisions at $\sqrt{s}=$ 8 TeV CMS Collaboration arXiv:1907.08155 [hep-ex].

Search for light pseudoscalar boson pairs produced from decays of the 125 GeV Higgs boson in final states with two muons and two nearby tracks in pp collisions at $\sqrt{s} = 13$ TeV CMS Collaboration arXiv:1907.07235 [hep-ex].

Search for physics beyond the standard model in events with overlapping photons and jets CMS Collaboration

arXiv:1907.06275 [hep-ex].

Study of the $B^+ o J$

 $psi\overline{\Lambda}p$ decay in proton-proton collisions at $\sqrt{s}=$ 8 TeV CMS Collaboration arXiv:1907.05461 [hep-ex].

Measurement of the top quark polarization and $t\bar{t}$ spin correlations using dilepton final states in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration arXiv:1907.03729 [hep-ex].

Search for MSSM Higgs bosons decaying to $\mu^+\mu^-$ in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration arXiv:1907.03152 [hep-ex].

Measurement of the top quark Yukawa coupling from $t\bar{t}$ kinematic distributions in the lepton+jets final state in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration arXiv:1907.01590 [hep-ex].

Combined search for supersymmetry with photons in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration arXiv:1907.00857 [hep-ex].

Search for pair production of vector-like quarks in the fully hadronic final state CMS Collaboration arXiv:1906.11903 [hep-ex] .

Search for long-lived particles using nonprompt jets and missing transverse momentum with proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration arXiv:1906.06441 [hep-ex].

A multi-dimensional search for new heavy resonances decaying to boosted WW, WZ, or ZZ boson pairs in the dijet final state at 13 TeV CMS Collaboration arXiv:1906.05977 [hep-ex].

Production of Λ_c^+ baryons in proton-proton and lead-lead collisions at $\sqrt{s_{
m NN}}=$ 5.02 TeV CMS Collabora-

tion

arXiv:1906.03322 [hep-ex]

Search for the production of four top quarks in the single-lepton and opposite-sign dilepton final states in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration arXiv:1906.02805 [hep-ex].

Combination of CMS searches for heavy resonances decaying to pairs of bosons or leptons CMS Collaboration

arXiv:1906.00057 [hep-ex].

Search for supersymmetry with a compressed mass spectrum in the vector boson fusion topology with 1-lepton and 0-lepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV CMS Collaboration arXiv:1905.13059 [hep-ex].

Search for vector-like leptons in multilepton final states in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1905.10853 [hep-ex].

Search for Higgs and Z boson decays to $J\Psi$ or Υ pairs in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1905.10408 [hep-ex].

Search for low-mass quark-antiquark resonances produced in association with a photon at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1905.10331 [hep-ex].

Correlations of azimuthal anisotropy Fourier harmonics in pPb collisions at $\sqrt{s_{
m NN}}=$ 8.16 TeV CMS Collaboration

arXiv:1905.09935 [hep-ex].

Search for anomalous electroweak production of vector boson pairs in association with two jets in protonproton collisions at 13 TeV CMS Collaboration

arXiv:1905.07445 [hep-ex].

Search for a light charged Higgs boson decaying to a W boson and a CP-odd Higgs boson in final states with $e\mu\mu$ or $\mu\mu\mu$ in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration arXiv:1905.07453 [hep-ex].

Search for the production of $W^{\pm}W^{\pm}W^{\mp}$ events at $\sqrt{s}=$ 13 TeV CMS Collaboration arXiv:1905.04246 [hep-ex]].

Observation of nuclear modifications in W $^\pm$ boson production in pPb collisions at $\sqrt{s_{
m NN}}=$ 8.16 TeV CMS Collaboration

arXiv:1905.01486 [hep-ex].

Multiparticle correlation studies in pPb collisions at $\sqrt{s_{\rm NN}}=$ 8.16 TeV CMS Collaboration arXiv:1904.11519 [hep-ex].

Measurement of $t\bar t$ normalised multi-differential cross sections in pp collisions at $\sqrt s=13$ TeV, and simultaneous determination of the strong coupling strength, top quark pole mass, and parton distribution functions CMS Collaboration

arXiv:1904.05237 [hep-ex].

Search for resonances decaying to a pair of Higgs bosons in the $b \overline{b} q \overline{q}' \ell \nu$ final state in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1904.04193 [hep-ex].

Extraction and validation of a new set of CMS PYTHIA8 tunes from underlying-event measurements CMS Collaboration

arXiv:1903.12179 [hep-ex].

Search for supersymmetry in final states with photons and missing transverse momentum in proton-proton collisions at 13 TeV CMS Collaboration

arXiv:1903.07070 [hep-ex].

Constraints on anomalous HVV couplings from the production of Higgs bosons decaying to τ lepton pairs CMS Collaboration

arXiv:1903.06973 [hep-ex].

Performance of missing transverse momentum reconstruction in proton-proton collisions at $\sqrt{s}=$ 13 TeV using the CMS detector CMS Collaboration

arXiv:1903.06078 [hep-ex].

Search for charged Higgs bosons in the H $^\pm \to au^\pm
u_ au$ decay channel in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1903.04560 [hep-ex].

Measurement of electroweak production of a W boson in association with two jets in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1903.04040 [hep-ex].

An embedding technique to determine $\tau\tau$ backgrounds in proton-proton collision data CMS Collaboration arXiv:1903.01216 [hep-ex].

Search for a heavy pseudoscalar boson decaying to a Z and a Higgs boson at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1903.00941 [hep-ex].

Azimuthal separation in nearly back-to-back jet topologies in inclusive 2- and 3-jet events in pp collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1902.04374 [hep-ex].

Pseudorapidity distributions of charged hadrons in xenon-xenon collisions at $\sqrt{s_{
m NN}}=$ 5.44 TeV CMS Collaboration

arXiv:1902.03603 [hep-ex].

Measurement of exclusive $ho(770)^0$ photoproduction in ultraperipheral pPb collisions at $\sqrt{s_{
m NN}}=$ 5.02 TeV CMS Collaboration

arXiv:1902.01339 [hep-ex].

Observation of Two Excited B_c^+ States and Measurement of the B_c^+ (2S) Mass in pp Collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1902.00571 [hep-ex].

Search for W boson decays to three charged pions CMS Collaboration

arXiv:1901.11201 [hep-ex].

Charged-particle angular correlations in XeXe collisions at $\sqrt{s_{\mathrm{NN}}}=$ 5.44 TeV CMS Collaboration arXiv:1901.07997 [hep-ex].

Search for supersymmetry in events with a photon, jets, b-jets, and missing transverse momentum in proton-

proton collisions at 13 TeV CMS Collaboration arXiv:1901.06726 [hep-ex].

Measurement of electroweak WZ boson production and search for new physics in WZ + two jets events in pp collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1901.04060 [hep-ex].

Measurements of the pp \to WZ inclusive and differential production cross section and constraints on charged anomalous triple gauge couplings at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1901.03428 [hep-ex].

Measurements of the Higgs boson width and anomalous HVV couplings from on-shell and off-shell production in the four-lepton final state CMS Collaboration

arXiv:1901.00174 [hep-ex].

Search for dark matter produced in association with a single top quark or a top quark pair in proton-proton collisions at $\sqrt{s}=13$ TeV CMS Collaboration

arXiv:1901.01553 [hep-ex].

Search for the pair production of light top squarks in the ${\bf e}^\pm\mu^\mp$ final state in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1901.01288 [hep-ex].

Measurement of the differential Drell-Yan cross section in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1812.10529 [hep-ex].

Search for vector-like quarks in events with two oppositely charged leptons and jets in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1812.09768 [hep-ex].

Search for contact interactions and large extra dimensions in the dilepton mass spectra from proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1812.10443 [hep-ex].

Search for a heavy resonance decaying to a top quark and a vector-like top quark in the lepton+jets final state in pp collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1812.06489[hep-ex].

Measurement and interpretation of differential cross sections for Higgs boson production at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1812.06504 [hep-ex].

Inclusive search for supersymmetry in pp collisions at $\sqrt{s}=13$ TeV using razor variables and boosted object identification in zero and one lepton final states CMS Collaboration

arXiv:1812.06302 [hep-ex].

Search for an exotic decay of the Higgs boson to a pair of light pseudoscalars in the final state with two muons and two b quarks in pp collisions at 13 TeV CMS Collaboration

arXiv:1812.06359 [hep-ex].

Observation of Single Top Quark Production in Association with a Z Boson in Proton-Proton Collisions at \sqrt{s} =13âĂLâĂLTeV CMS Collaboration

arXiv:1812.05900 [hep-ex].

Measurement of the energy density as a function of pseudorapidity in proton-proton collisions at \sqrt{s} =

13 TeV CMS Collaboration arXiv:1812.04095 [hep-ex].

Search for supersymmetry in events with a photon, a lepton, and missing transverse momentum in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration arXiv:1812.04066 [hep-ex].

Measurement of inclusive very forward jet cross sections in proton-lead collisions at $\sqrt{s_{
m NN}}=$ 5.02 TeV CMS Collaboration

arXiv:1812.01691 [hep-ex].

A search for pair production of new light bosons decaying into muons in proton-proton collisions at 13 TeV CMS Collaboration

arXiv:1812.00380 [hep-ex].

Measurement of associated production of a W boson and a charm quark in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration arXiv:1811.10021 [hep-ex].

Search for dark matter in events with a leptoquark and missing transverse momentum in proton-proton collisions at 13 TeV CMS Collaboration

arXiv:1811.10151 [hep-ex].

Search for resonant production of second-generation sleptons with same-sign dimuon events in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1811.09760 [hep-ex].

Search for associated production of a Higgs boson and a single top quark in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration arXiv:1811.09696 [hep-ex].

Combination of searches for Higgs boson pair production in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1811.09689 [hep-ex].

Search for a standard model-like Higgs boson in the mass range between 70 and 110 GeV in the diphoton final state in proton-proton collisions at $\sqrt{s}=8$ and 13 TeV CMS Collaboration e-Print: arXiv:1811.08459 [hep-ex].

Search for long-lived particles decaying into displaced jets in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1811.07991 [hep-ex].

Search for a WâĂš boson decaying to a vector-like quark and a top or bottom quark in the all-jets final state CMS Collaboration

arXiv:1811.07010 [hep-ex].

Search for dark matter produced in association with a Higgs boson decaying to a pair of bottom quarks in protonâÄŞproton collisions at $\sqrt{s}=13\text{TeV}$ CMS Collaboration arXiv:1811.06562 [hep-ex].

Search for excited leptons in $\ell\ell\gamma$ final states in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1811.03052 [hep-ex].

Search for pair production of first-generation scalar leptoquarks at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1811.01197 [hep-ex].

Search for heavy neutrinos and third-generation leptoquarks in hadronic states of two τ leptons and two jets in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration arXiv:1811.00806 [hep-ex].

Event shape variables measured using multijet final states in proton-proton collisions at $\sqrt{s}=13$ TeV CMS Collaboration

arXiv:1811.00588 [hep-ex].

Search for nonresonant Higgs boson pair production in the $b\overline{b}b\overline{b}$ final state at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1810.11854 [hep-ex].

Search for low-mass resonances decaying into bottom quark-antiquark pairs in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1810.11822 [hep-ex].

Studies of beauty suppression via nonprompt ${f D}^0$ mesons in PbPb collisions at $\sqrt{s_{
m NN}}=$ 5.02 TeV <code>CMS</code> Collaboration

arXiv:1810.11102 [hep-ex].

Search for rare decays of Z and Higgs bosons to ${\bf J}/\psi$ and a photon in proton-proton collisions at $\sqrt{s}=$ 13 TeV CMS Collaboration

arXiv:1810.10056 [hep-ex].

Search for new particles decaying to a jet and an emerging jet CMS Collaboration arXiv:1810.10069 [hep-ex].

Search for pair-produced three-jet resonances in proton-proton collisions at \sqrt{s} =13 TeV CMS Collaboration

arXiv:1810.10092 [hep-ex].

Search for resonant $t\bar{t}$ production in proton-proton collisions at $\sqrt{s}=13$ TeV CMS Collaboration e-Print: arXiv:1810.05905 [hep-ex].

Centrality and pseudorapidity dependence of the transverse energy density in pPb collisions at $\sqrt{s_{
m NN}}=$ 5.02 TeV CMS Collaboration

arXiv:1810.05745 [hep-ex].

Evidence for light-by-light scattering and searches for axion-like particles in ultraperipheral PbPb collisions at $\sqrt{s_{
m NN}}=$ 5.02 TeV CMS Collaboration

arXiv:1810.04602 [hep-ex].

Measurement of B_s^0 meson production in pp and PbPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV CMS Collaboration arXiv:1810.03022 [hep-ex].

Search for top quark partners with charge 5/3 in the same-sign dilepton and single-lepton final states in proton-proton collisions at $\sqrt{s}=13$ TeV CMS Collaboration arXiv:1810.03188 [hep-ex].

Observation of prompt J/ ψ meson elliptic flow in high-multiplicity pPb collisions at $\sqrt{s_{
m NN}}=$ 8.16 TeV CMS Collaboration

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Collaboration

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TeV CMS Collaboration arXiv:1612.09159 [hep-ex].

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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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Eur. Phys. J. C76 (2016) no.8, 469.

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CMS Collaboration

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Eur. Phys. J. C76 (2016) no.8, 460.

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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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JHEP 1601 (2016) 096.

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CMS Collaboration

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JHEP 1606 (2016) 177.

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CMS Collaboration

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CMS Collaboration

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Eur. Phys. J. C76 (2016) no.3, 128.

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CMS Collaboration

arXiv:1509.06051 [hep-ex].

JHEP 1602 (2016) 122.

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CMS Collaboration

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CMS Collaboration

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Phys.Rev. D93 (2016) no.7, 072004.

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CMS Collaboration

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CMS Collaboration

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Phys.Rev. D93 (2016) no.3, 032005.

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CMS Collaboration

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Phys.Rev. D93 (2016) no.3, 032004.

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CMS Collaboration

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Eur. Phys. J. C76 (2016) no.1, 13.

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CMS Collaboration

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JHEP 1511 (2015) 018.

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CMS Collaboration

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JHEP 1511 (2015) 189.

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CMS Collaboration

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Phys.Rev.Lett. 116 (2016) no.3, 032301.

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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.Lett. B757 (2016) 97-120.

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CMS Collaboration

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JHEP 1509 (2015) 137.

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CMS Collaboration

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Phys.Rev. D93 (2016) no.11, 112009.

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CMS Collaboration

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

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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Phys.Lett. B757 (2016) 154-179.

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CMS Collaboration

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

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

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CMS Collaboration

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CMS Collaboration

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

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CMS Collaboration

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JHEP 1511 (2015) 071.

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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JHEP 1602 (2016) 145.

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Collaboration

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

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 $arXiv:1506.00424 \ [hep-ex].$

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

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CMS Collaboration

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JHEP 1509 (2015) 201.

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CMS Collaboration

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JHEP 1510 (2015) 128.

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CMS Collaboration

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Eur. Phys. J. C75 (2015) 11, 542.

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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JHEP 1506 (2015) 121.

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CMS Collaboration

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JHEP 1510 (2015) 144.

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CMS Collaboration

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JHEP 1507 (2015) 042.

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CMS Collaboration

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

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CMS Collaboration

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JHEP 1506 (2015) 116.

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ATLAS and CMS Collaborations

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CMS Collaboration

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

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CMS Collaboration

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

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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:1502.05382 [nucl-ex]. Phys.Rev.Lett. 115 (2015) 1, 012301.

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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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Eur. Phys. J. C75 (2015) 4, 151.

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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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JHEP 1501 (2015) 063.

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CMS Collaboration

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JHEP 1503 (2015) 022...

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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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Eur. Phys. J. C75 (2015) 5, 235.

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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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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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JHEP 1312 (2013) 039.

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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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JHEP 1310 (2013) 062.

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

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CMS Collaboration

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JHEP 1302 (2013) 085.

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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JHEP 1301 (2013) 154.

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CMS Collaboration

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

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

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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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JHEP 1211 (2012) 067.

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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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Eur. Phys. J. C72 (2012) 2164.

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CMS Collaboration

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CMS Collaboration

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Eur. Phys. J. C72 (2012) 2189.

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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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Eur. Phys. J. C72 (2012) 2216.

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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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JHEP 1108 (2011) 005.

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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 1107 (2011) 049.

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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JHEP 1106 (2011) 093.

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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 1108 (2011) 117.

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CMS Collaboration

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CMS Collaboration

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CMS Collaboration

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JHEP 1104 (2011) 050.

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CMS Collaboration

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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:

'Higgs to WW measurements with 15.2 fb^{-1} of 13 TeV proton-proton collisions' - HIG-16-021 - [C - Higgs to WW]

'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 ttbar 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 bar b l
u l
u final state at $\sqrt s=13$ TeV' - HIG-16-011 [R - Higgs to WW]

'Search for ttH 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 $H\to WW$ 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 $\sqrt{s} = 8$ TeV' (CMS-PAS-TOP-14-004) [R - Single top]

'Search for $H \to b \bar b$ 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 $\sqrt{s}=8$ 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 $H\to b\bar{b}$ 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 $\sqrt{s}=8$ 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 $\sqrt{s}=8$ TeV' (CMS-PAS-HIG-14-001) [R-ARC]
- 'Projections for Top FCNC Searches in $3000fb^{-1}$ at the LHC' (CMS-PAS-FTR-13-016) [R-ARC]
- 'Sensitivity study of the prospects for searching for heavy vector-like charge 2/3 quarks at $\sqrt{s}=14$ 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 $B_s^0 \to \mu^+\mu^-$ and $B^0 \to \mu^+\mu^-$ 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 $\sqrt{s}=8$ 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 $\sqrt{s}=8$ 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 $\sqrt{s}=8$ 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 $\sqrt(s)=8$ 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 $\sqrt{s}=7$ 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 ightarrow WW ightarrow 2l 2nu' (CMS-PAS-HIG-10-003) [C]

'Observation of WW final state' (CMS-PAS-EWK-009) [C]

'Performance of muon identification in pp collisions at $\sqrt{s}=7$ 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:

'Measurement of the single top quark and antiquark production cross sections in the t channel and their ratio in pp collisions at $\sqrt{s}=13$ TeV' TOP-17-011

'Measurement of the top quark mass in the all-jets final state at $\sqrt{s}=13$ TeV' TOP-17-008

'Measurements of differential cross sections for $t\bar{t}$ production in proton-proton collisions at $\sqrt{s}=13$ TeV using events containing two leptons' TOP-17-014

'Search for top+photon production in pp collisions at 13 TeV in the muon+jets channel' TOP-17-016

'Study of the underlying event in top quark pair production at $\sqrt{s}=13$ TeV' TOP-17-015

'Measurement of jet substructure observables in $t\bar{t}$ events from pp collisions at $\sqrt{s}=13$ TeV' TOP-17-013

'Search for the flavor-changing interactions of the top quark with the Higgs boson in $H\to b\bar b$ channel at $\sqrt s=13$ TeV' TOP-17-003

'Evidence for the standard model production of a Z boson with a single top quark in pp collisions at $\sqrt{s}=13$ TeV' TOP-16-020

'Measurement of the production cross section for single top quarks in association with W bosons in pp collisions at $\sqrt{s}=13$ TeV' TOP-17-018

'Measurement of the top quark mass with lepton+jets final states in pp collisions at $\sqrt{s}=13$ TeV' TOP-17-007

'Measurement of differential cross sections for top quark pair production and associated jets using the lepton+jets final state in proton-proton collisions at 13 TeV' TOP-17-002

'Search for the standard model production of four top quarks with same-sign and multilepton final states in proton-proton collisions at $\sqrt{s}=13$ TeV ' TOP-17-009

'Measurement of the differential $t\bar{t}$ cross section with high- p_T top-quark jets in the all-hadronic channel at $\sqrt{s}=8$ TeV ' TOP-16-018

'Measurement of the differential cross sections of top quark pair production as a function of kinematic event variables in pp collisions at $\sqrt{s}=13$ TeV' TOP-16-014

'Measurement of top quark pair-production in association with a W or Z boson in pp collisions at 13 TeV' TOP-17-005

'Measurement of the inclusive $t\bar{t}$ cross section at $\sqrt{s}=5.02$ TeV' TOP-16-023

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'Investigations of the impact of the parton shower tuning in Pythia 8 in the modelling of $t\bar{t}$ at \sqrt{s} =8 and 13 TeV' (TOP-16-021)

'Combinations of the CMS alternative technique measurements of the top quark mass' (TOP-15-012)

'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 \rightarrow 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 $H \rightarrow bb$ 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 $H\rightarrow WW$ 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 \to 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.~Calder'on~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 $WW \to \mu\nu\mu\nu$ 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 $WW \to \mu\nu\mu\nu$ 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 ightarrow WW and ZZ decay channels' (S. Baffioni, C. Botta et al.) [PA]

CMS AN-2008/074 - 'Measurement of muon charge asymmetry in the $W \to \mu\nu$ 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]

July 26, 2019