Liste exhaustive de publications depuis le début de carrière (1994)

Les références en rouge soulignent les papiers où ma contribution est significative.

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## 1 Publications dans la collaboration Super-Kamiokande

 "Dinucleon and Nucleon Decay to Two-Body Final States with no Hadrons in Super-Kamiokande Super-kamiokande Collaboration arXiv :1811.12430 Submitted to PRL

## 2 Publications dans la collaboration CMS

- 1. "Search for the production of  $W^{\pm}W^{\pm}W^{\mp}$  events at  $\sqrt{s} = 13$  TeV" A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1905.04246 [hep-ex] Phys. Rev. D **100**, no. 1, 012004 (2019)
- "Search for a low-mass τ<sup>+</sup>τ<sup>-</sup> resonance in association with a bottom quark in proton-proton collisions at √s = 13 TeV"
   A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1903.10228 [hep-ex]
- JHEP 1905, 210 (2019)
  3. "Search for supersymmetry in final states with photons and missing transverse momentum in protonproton collisions at 13 TeV"
  A. M. Sirunyan *et al.* [CMS Collaboration].
  arXiv :1903.07070 [hep-ex]
  JHEP 1906, 143 (2019)
  - 4. "Performance of missing transverse momentum reconstruction in proton-proton collisions at √s = 13 TeV using the CMS detector"
    A. M. Sirunyan *et al.* [CMS Collaboration].

A. M. Shruhyan *et al.* [CMS Collaboration] arXiv :1903.06078 [hep-ex] JINST **14**, no. 07, P07004 (2019) 5. "Search for charged Higgs bosons in the  $\mathbf{H}^{\pm} \to \tau^{\pm} \nu_{\tau}$  decay channel in proton-proton collisions at  $\sqrt{s} = 13 \text{ TeV}$ " A. M. Simmun *et al.* [CMS Collaboration]

A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1903.04560 [hep-ex] JHEP **1907**, 142 (2019)

- 6. "An embedding technique to determine ττ backgrounds in proton-proton collision data" A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1903.01216 [hep-ex] JINST 14, no. 06, P06032 (2019)
- 7. "Search for a heavy pseudoscalar boson decaying to a Z and a Higgs boson at  $\sqrt{s} = 13$  TeV" A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1903.00941 [hep-ex] Eur. Phys. J. C **79**, no. 7, 564 (2019)
- 8. "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 experimentsCombinations of single-top-quark production cross-section measurements and  $-\mathbf{f}_{LV}\mathbf{V}_{tb}$  determinations at  $\sqrt{s} = 7$  and 8 TeV with the ATLAS and CMS experiments"

M. Aaboud *et al.* [ATLAS and CMS Collaborations]. arXiv :1902.07158 [hep-ex] JHEP **1905**, 088 (2019)

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

A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv :1902.00571 [hep-ex]
Phys. Rev. Lett. **122**, no. 13, 132001 (2019)

- 10. "Search for W boson decays to three charged pions" A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1901.11201 [hep-ex] Phys. Rev. Lett. **122**, no. 15, 151802 (2019)
- 11. "Search for supersymmetry in events with a photon, jets, b -jets, and missing transverse momentum in proton-proton collisions at 13 TeV"
  A. M. Sirunyan *et al.* [CMS Collaboration].
  arXiv :1901.06726 [hep-ex]

Eur. Phys. J. C **79**, no. 5, 444 (2019)

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

A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv :1901.04060 [hep-ex]
Phys. Lett. B **795**, 281 (2019)

13. "Measurements of the pp → WZ inclusive and differential production cross section and constraints on charged anomalous triple gauge couplings at √s = 13 TeV"
A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1901.03428 [hep-ex]

JHEP **1904**, 122 (2019)

14. "Measurements of the Higgs boson width and anomalous *HVV* couplings from on-shell and off-shell production in the four-lepton final state" A. M. Sirunyan *et al.* [CMS Collaboration].

arXiv :1901.00174 [hep-ex] Phys. Rev. D **99**, no. 11, 112003 (2019)

15. "Search for dark matter produced in association with a single top quark or a top quark pair in proton-proton collisions at √s = 13 TeV"
A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv :1901.01553 [hep-ex]
JHEP 1903, 141 (2019)

16. "Search for the pair production of light top squarks in the  $e^{\pm}\mu^{\mp}$  final state in proton-proton collisions at  $\sqrt{s} = 13$  TeV" A. M. Simuta et al. [CMS Callaboration]

A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1901.01288 [hep-ex] JHEP **1903**, 101 (2019)

17. "Measurement of the top quark mass in the all-jets final state at  $\sqrt{s} = 13$  TeV and combination with the lepton+jets channel"

A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv :1812.10534 [hep-ex]
Eur. Phys. J. C **79**, no. 4, 313 (2019)

- 18. "Measurement of the tt production cross section, the top quark mass, and the strong coupling constant using dilepton events in pp collisions at √s = 13 TeV"
  A. M. Sirunyan et al. [CMS Collaboration]. arXiv :1812.10505 [hep-ex] Eur. Phys. J. C 79, no. 5, 368 (2019)
- 19. "Search for vector-like quarks in events with two oppositely charged leptons and jets in proton-proton collisions at √s = 13 TeV"
  A. M. Sirunyan et al. [CMS Collaboration].

arXiv :1812.09768 [hep-ex] Eur. Phys. J. C **79**, no. 4, 364 (2019)

- 20. "Search for contact interactions and large extra dimensions in the dilepton mass spectra from proton-proton collisions at √s = 13 TeV"
  A. M. Sirunyan et al. [CMS Collaboration].
  arXiv :1812.10443 [hep-ex]
  JHEP 1904, 114 (2019)
- 21. "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 √s = 13 TeV"
  A. M. Sirunyan *et al.* [CMS Collaboration].
  arXiv :1812.06489 [hep-ex]

Eur. Phys. J. C **79**, no. 3, 208 (2019)

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

A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1812.06504 [hep-ex] Phys. Lett. B **792**, 369 (2019)

23. "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"

A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1812.06302 [hep-ex] JHEP **1903**, 031 (2019)

24. "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"

A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv :1812.06359 [hep-ex]
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25. "Observation of Single Top Quark Production in Association with a Z Boson in Proton-Proton Collisions at  $\sqrt{s} = 13$  TeV"

A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv :1812.05900 [hep-ex]
Phys. Rev. Lett. **122**, no. 13, 132003 (2019)

26. "Measurement of the energy density as a function of pseudorapidity in proton-proton collisions at  $\sqrt{s} = 13$  TeV"

A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv :1812.04095 [hep-ex]
Eur. Phys. J. C **79**, no. 5, 391 (2019)

27. "Search for supersymmetry in events with a photon, a lepton, and missing transverse momentum in proton-proton collisions at  $\sqrt{s} = 13$  TeV"

A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1812.04066 [hep-ex] JHEP **1901**, 154 (2019)

28. "Measurement of inclusive very forward jet cross sections in proton-lead collisions at  $\sqrt{s_{\text{NN}}} = 5.02 \text{ TeV}$ " A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1812.01691 [hep-ex]

JHEP **1905**, 043 (2019)

29. "A search for pair production of new light bosons decaying into muons in proton-proton collisions at 13 TeV"

A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv :1812.00380 [hep-ex]
Phys. Lett. B **796**, 131 (2019)

30. "Measurement of associated production of a W boson and a charm quark in proton-proton collisions at √s = 13 TeV"
A. M. Sirunyan *et al.* [CMS Collaboration].

arXiv :1811.10021 [hep-ex] Eur. Phys. J. C **79**, no. 3, 269 (2019)

31. "Search for dark matter in events with a leptoquark and missing transverse momentum in proton-proton collisions at 13 TeV"

A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv :1811.10151 [hep-ex]
Phys. Lett. B **795**, 76 (2019)

- 32. "Search for resonant production of second-generation sleptons with same-sign dimuon events in proton-proton collisions at √s = 13 TeV"
  A. M. Sirunyan et al. [CMS Collaboration].
  arXiv :1811.09760 [hep-ex]
  Eur. Phys. J. C 79, no. 4, 305 (2019)
- 33. "Search for associated production of a Higgs boson and a single top quark in proton-proton collisions at  $\sqrt{s} = \text{TeV}$ "

A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv :1811.09696 [hep-ex]
Phys. Rev. D **99**, no. 9, 092005 (2019)

- 34. "Combination of searches for Higgs boson pair production in proton-proton collisions at √s = 13 TeV"
  A. M. Sirunyan *et al.* [CMS Collaboration].
  arXiv :1811.09689 [hep-ex]
  Phys. Rev. Lett. 122, no. 12, 121803 (2019)
- 35. "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 √s = 8 and 13 TeV"
  A. M. Sirunyan et al. [CMS Collaboration].
  arXiv :1811.08459 [hep-ex]
  Phys. Lett. B 793, 320 (2019)
- 36. "Search for long-lived particles decaying into displaced jets in proton-proton collisions at  $\sqrt{s} = 13$  TeV" A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1811.07991 [hep-ex] Phys. Rev. D **99**, no. 3, 032011 (2019)
- 37. "Search for a W' boson decaying to a vector-like quark and a top or bottom quark in the all-jets final state"

A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv :1811.07010 [hep-ex]
JHEP **1903**, 127 (2019)

38. "Measurements of t $\bar{t}$  differential cross sections in proton-proton collisions at  $\sqrt{s} = 13$  TeV using events containing two leptons"

A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv :1811.06625 [hep-ex]
JHEP **1902**, 149 (2019)

- 39. "Search for dark matter produced in association with a Higgs boson decaying to a pair of bottom quarks in proton-proton collisions at √s = 13 TeV"
  A. M. Sirunyan *et al.* [CMS Collaboration].
  arXiv :1811.06562 [hep-ex]
  Eur. Phys. J. C **79**, no. 3, 280 (2019)
- 40. "Search for excited leptons in  $\ell\ell\gamma$  final states in proton-proton collisions at  $\sqrt{s} = 13$  TeV" A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1811.03052 [hep-ex] JHEP **1904**, 015 (2019)
- 41. "Search for pair production of first-generation scalar leptoquarks at  $\sqrt{s} = 13$  TeV" A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1811.01197 [hep-ex] Phys. Rev. D **99**, no. 5, 052002 (2019)
- 42. "Search for heavy neutrinos and third-generation leptoquarks in hadronic states of two τ leptons and two jets in proton-proton collisions at √s = 13 TeV"
  A. M. Sirunyan *et al.* [CMS Collaboration].
  arXiv :1811.00806 [hep-ex]
  JHEP 1903, 170 (2019)
- 43. "Event shape variables measured using multijet final states in proton-proton collisions at √s = 13 TeV" A. M. Sirunyan et al. [CMS Collaboration]. arXiv :1811.00588 [hep-ex] JHEP 1812, 117 (2018)
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- 44. "Search for nonresonant Higgs boson pair production in the bbbb final state at √s = 13 TeV" A. M. Sirunyan et al. [CMS Collaboration]. arXiv :1810.11854 [hep-ex] JHEP 1904, 112 (2019)
- 45. "Search for low-mass resonances decaying into bottom quark-antiquark pairs in proton-proton collisions at √s = 13 TeV"
  A. M. Sirunyan *et al.* [CMS Collaboration].
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46. "Search for rare decays of Z and Higgs bosons to  $J/\psi$  and a photon in proton-proton collisions at  $\sqrt{s} = 13$  TeV"

A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv :1810.10056 [hep-ex]
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- 47. "Search for new particles decaying to a jet and an emerging jet"
  A. M. Sirunyan *et al.* [CMS Collaboration].
  arXiv :1810.10069 [hep-ex]
  JHEP 1902, 179 (2019)
- 48. "Search for pair-produced three-jet resonances in proton-proton collisions at √s =13 TeV"
  A. M. Sirunyan *et al.* [CMS Collaboration].
  arXiv :1810.10092 [hep-ex]
  Phys. Rev. D 99, no. 1, 012010 (2019)
- 49. "Measurement of  $\mathbf{B}_{s}^{0}$  meson production in pp and PbPb collisions at  $\sqrt{s_{NN}} = 5.02$  TeV" A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1810.03022 [hep-ex] Phys. Lett. B **796**, 168 (2019)
- 50. "Search for top quark partners with charge 5/3 in the same-sign dilepton and single-lepton final states in proton-proton collisions at √s = 13 TeV"
  A. M. Sirunyan *et al.* [CMS Collaboration].

arXiv :1810.03188 [hep-ex] JHEP **1903**, 082 (2019)

- 51. "Observation of prompt  $J/\psi$  meson elliptic flow in high-multiplicity pPb collisions at  $\sqrt{s_{\rm NN}} = 8.16$  TeV" A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1810.01473 [hep-ex] Phys. Lett. B **791**, 172 (2019)
- 52. "Search for new physics in final states with a single photon and missing transverse momentum in proton-proton collisions at √s = 13 TeV"
  A. M. Sirunyan *et al.* [CMS Collaboration].
  arXiv :1810.00196 [hep-ex]
  JHEP 1902, 074 (2019)
- 53. "Combined measurements of Higgs boson couplings in proton–proton collisions at √s = 13 TeV" A. M. Sirunyan et al. [CMS Collaboration]. arXiv :1809.10733 [hep-ex] Eur. Phys. J. C 79, no. 5, 421 (2019)
- 54. "Measurement of exclusive  $\Upsilon$  photoproduction from protons in pPb collisions at  $\sqrt{s_{\text{NN}}} = 5.02$  TeV" A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1809.11080 [hep-ex] Eur. Phys. J. C **79**, no. 3, 277 (2019)
- 55. "Search for single production of vector-like quarks decaying to a top quark and a W boson in proton-proton collisions at √s = 13 TeV"
  A. M. Sirunyan et al. [CMS Collaboration].
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- 56. "Search for leptoquarks coupled to third-generation quarks in proton-proton collisions at √s = 13 TeV" A. M. Sirunyan *et al.* [CMS Collaboration].
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  Phys. Rev. Lett. 121, no. 24, 241802 (2 018)
- 57. "Search for invisible decays of a Higgs boson produced through vector boson fusion in proton-proton collisions at √s = 13 TeV"
  A. M. Sirunyan *et al.* [CMS Collaboration].

arXiv :1809.05937 [hep-ex] Phys. Lett. B **793**, 520 (2019)

58. "Studies of  $B^{*s2}(5840)^0$  and  $B_{s1}(5830)^0$  mesons including the observation of the  $B^{*s2}(5840)^0 \rightarrow B^0 K_S^0$  decay in proton-proton collisions at  $\sqrt{s} = 8 \text{ TeV}$ " A. M. Sirunyan *et al.* [CMS Collaboration].

arXiv :1809.03578 [hep-ex] Eur. Phys. J. C **78**, no. 11, 939 (2018)

59. "Performance of reconstruction and identification of  $\tau$  leptons decaying to hadrons and  $\nu_{\tau}$  in pp collisions at  $\sqrt{s} = 13$  TeV" A. M. Sirunyan *et al.* [CMS Collaboration].

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- 60. "Search for physics beyond the standard model in high-mass diphoton events from proton-proton collisions at √s = 13 TeV"
  A. M. Sirunyan et al. [CMS Collaboration].
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  Phys. Rev. D 98, no. 9, 092001 (2018)
- 61. "Observation of Higgs boson decay to bottom quarks"
  A. M. Sirunyan *et al.* [CMS Collaboration].
  arXiv :1808.08242 [hep-ex]
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- 62. "Measurement of jet substructure observables in  $t\bar{t}$  events from proton-proton collisions at  $\sqrt{s} = 13$ TeV" A. M. Sirunyan *et al.* [CMS Collaboration].

arXiv :1808.07340 [hep-ex] Phys. Rev. D **98**, no. 9, 092014 (2018)

63. "Search for a charged Higgs boson decaying to charm and bottom quarks in proton-proton collisions at  $\sqrt{s} = 8$  TeV"

A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1808.06575 [hep-ex] JHEP **1811**, 115 (2018)

64. "Search for pair production of second-generation leptoquarks at  $\sqrt{s} = 13$  TeV"

A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv :1808.05082 [hep-ex]
Phys. Rev. D **99**, no. 3, 032014 (2019)

- 65. "Search for an L<sub>μ</sub> − L<sub>τ</sub> gauge boson using Z→ 4μ events in proton-proton collisions at √s = 13 TeV"
  A. M. Sirunyan et al. [CMS Collaboration].
  arXiv :1808.03684 [hep-ex]
  Phys. Lett. B **792**, 345 (2019)
- 66. "Evidence for the associated production of a single top quark and a photon in proton-proton collisions at  $\sqrt{s} = 13$  TeV"

A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1808.02913 [hep-ex] Phys. Rev. Lett. **121**, no. 22, 221802 (2018)

67. "Search for long-lived particles with displaced vertices in multijet events in proton-proton collisions at  $\sqrt{s} = 13$  TeV"

A. M. Sirunyan *et al.* [CMS Collaboration].
arXiv :1808.03078 [hep-ex]
Phys. Rev. D 98, no. 9, 092011 (2018)

68. "Search for pair-produced resonances decaying to quark pairs in proton-proton collisions at  $\sqrt{s} = 13$  TeV"

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69. "Search for heavy resonances decaying into two Higgs bosons or into a Higgs boson and a W or Z boson in proton-proton collisions at 13 TeV"

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70. "Search for production of Higgs boson pairs in the four b quark final state using large-area jets in proton-proton collisions at  $\sqrt{s} = 13$  TeV"

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71. "Search for resonances in the mass spectrum of muon pairs produced in association with b quark jets in proton-proton collisions at  $\sqrt{s} = 8$  and 13 TeV"

A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1808.01890 [hep-ex] JHEP **1811**, 161 (2018)

72. "Search for a W' boson decaying to a  $\tau$  lepton and a neutrino in proton-proton collisions at  $\sqrt{s} = 13$  TeV"

A. M. Sirunyan *et al.* [CMS Collaboration].
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73. "Searches for pair production of charginos and top squarks in final states with two oppositely charged leptons in proton-proton collisions at  $\sqrt{s} = 13$  TeV"

A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1807.07799 [hep-ex] JHEP **1811**, 079 (2018)

- 74. "Search for dark matter particles produced in association with a top quark pair at  $\sqrt{s} = 13$  TeV" A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1807.06522 [hep-ex] Phys. Rev. Lett. 122, no. 1, 011803 (2019) 75. "Search for the Higgs boson decaying to two muons in proton-proton collisions at  $\sqrt{s} = 13$  TeV" A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1807.06325 [hep-ex] Phys. Rev. Lett. 122, no. 2, 021801 (2019) 76. "Measurements of the differential jet cross section as a function of the jet mass in dijet events from proton-proton collisions at  $\sqrt{s} = 13$  TeV" A. M. Sirunyan et al. [CMS Collaboration]. arXiv :1807.05974 [hep-ex] JHEP 1811, 113 (2018) 77. "Measurement of inclusive and differential Higgs boson production cross sections in the diphoton decay channel in proton-proton collisions at  $\sqrt{s} = 13$  TeV" A. M. Sirunyan et al. [CMS Collaboration]. arXiv :1807.03825 [hep-ex] JHEP 1901, 183 (2019) 78. "Search for heavy resonances decaying into a vector boson and a Higgs boson in final states with charged leptons, neutrinos and b quarks at  $\sqrt{s} = 13$  TeV" A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1807.02826 [hep-ex] JHEP 1811, 172 (2018) 79. "Search for supersymmetry in events with a  $\tau$  lepton pair and missing transverse momentum in protonproton collisions at  $\sqrt{s} = 13$  TeV" A. M. Sirunyan et al. [CMS Collaboration]. arXiv :1807.02048 [hep-ex] JHEP 1811, 151 (2018) 80. "Measurement of charged particle spectra in minimum-bias events from proton-proton collisions at  $\sqrt{s} = 13 \,\mathrm{TeV}$ " A. M. Sirunyan et al. [CMS Collaboration]. arXiv :1806.11245 [hep-ex] Eur. Phys. J. C 78, no. 9, 697 (2018) 81. "Measurement of differential cross sections for Z boson pair production in association with jets at  $\sqrt{s}$  = 8 and 13 TeV" A. M. Sirunyan et al. [CMS Collaboration]. arXiv :1806.11073 [hep-ex] Phys. Lett. B 789, 19 (2019) 82. "Search for heavy Majorana neutrinos in same-sign dilepton channels in proton-proton collisions at  $\sqrt{s} = 13$  TeV" A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1806.10905 [hep-ex] JHEP 1901, 122 (2019) 83. "Search for resonant pair production of Higgs bosons decaying to bottom quark-antiquark pairs in proton-proton collisions at 13 TeV" A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1806.03548 [hep-ex] JHEP 1808, 152 (2018) 84. "Search for narrow and broad dijet resonances in proton-proton collisions at  $\sqrt{s} = 13$  TeV and constraints on dark matter mediators and other new particles"
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- 85. "Search for Higgs boson pair production in the  $\gamma\gamma b\bar{b}$  final state in pp collisions at  $\sqrt{s} = 13$  TeV" A. M. Sirunyan *et al.* [CMS Collaboration].

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86. "Measurement of nuclear modification factors of  $\Upsilon(1S)$ ,  $\Upsilon(2S)$ , and  $\Upsilon(3S)$  mesons in PbPb collisions at  $\sqrt{s_{_{\rm NN}}} = 5.02$  TeV"

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88. "Measurement of the top quark mass with lepton+jets final states using p p collisions at  $\sqrt{s} = 13 \text{ TeV}$ " A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1805.01428 [hep-ex]

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89. "Measurement of differential cross sections for Z boson production in association with jets in proton-proton collisions at √s = 13 TeV"
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90. "Performance of the CMS muon detector and muon reconstruction with proton-proton collisions at  $\sqrt{s} = 13$  TeV"

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91. "Measurements of Higgs boson properties in the diphoton decay channel in proton-proton collisions at  $\sqrt{s} = 13$  TeV"

A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1804.02716 [hep-ex] JHEP **1811**, 185 (2018)

92. "Search for a new scalar resonance decaying to a pair of Z bosons in proton-proton collisions at  $\sqrt{s} = 13$  TeV"

A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1804.01939 [hep-ex] JHEP **1806**, 127 (2018)

93. "Search for high-mass resonances in final states with a lepton and missing transverse momentum at  $\sqrt{s} = 13$  TeV"

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A. M. Sirunyan *et al.* [CMS Collaboration]. arXiv :1803.11116 [hep-ex] JHEP **1805**, no. 05, 148 (2018)

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