

ԷՔՍՊԵՐԻՄԵՆՏԱԼ ՖԻԶԻԿԱՅԻ ԲԱԺԱՆՄՈՒՆՔԻ  
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195 հրատարակում

1. Measurement of  $B_c(2S)^+$  and  $B_c^*(2S)^+$  cross section ratios in proton-proton collisions at  $\sqrt{s}=13$  TeV  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
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  2. Measurement of the top quark Yukawa coupling from  $tt$  kinematic distributions in the dilepton final state in proton-proton collisions at  $\sqrt{s}=13$  TeV  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
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  3.  $W^+ W^-$  boson pair production in proton-proton collisions at  $\sqrt{s}=13$  TeV  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
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  4. A search for bottom-type, vector-like quark pair production in a fully hadronic final state in proton-proton collisions at  $\sqrt{s}=13$  TeV  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
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  5. Dependence of inclusive jet production on the anti- $k_T$  distance parameter in pp collisions at  $\sqrt{s}=13$  TeV  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
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  6. Search for decays of the 125 GeV Higgs boson into a Z boson and a  $\rho$  or  $\phi$  meson  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
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  7. Investigation into the event-activity dependence of  $\Upsilon(nS)$  relative production in proton-proton collisions at  $\sqrt{s}=7$  TeV  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.
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Group Author(s): CMS Collaboration

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8. Measurements of production cross sections of polarized same-sign W boson pairs in association with two jets in proton-proton collisions at  $\sqrt{s} = 13$  TeV  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
PHYSICS LETTERS B Volume: 812 Article Number: 136018
9. Observation of electroweak production of  $W\gamma$  with two jets in proton-proton collisions at  $\sqrt{s} = 13$  TeV  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
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10. Measurements of production cross sections of WZ and same-sign WW boson pairs in association with two jets in proton-proton collisions at  $\sqrt{s} = 13$  TeV  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
PHYSICS LETTERS B Volume: 809 Article Number: 135710
11. Observation of the  $B_s^0 \rightarrow X(3872)\phi$  Decay  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
PHYSICAL REVIEW LETTERS Volume: 125 Issue: 15 Article Number: 152001
12. Search for a light charged Higgs boson in the  $H^\pm \rightarrow cs$  channel in proton-proton collisions at  $\sqrt{s} = 13$  TeV  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
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Group Author(s): CMS Collaboration  
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Group Author(s): CMS Collaboration

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By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
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17. Measurement of CKM matrix elements in single top quark t-channel production in proton-proton collisions at  $\sqrt{s}=13$  TeV  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
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Group Author(s): CMS Collaboration  
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19. Studies of Charm Quark Diffusion inside Jets Using Pb-Pb and pp Collisions at  $\sqrt{s_{NN}}=5.02$  TeV  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
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20. Pileup mitigation at CMS in 13 TeV data  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
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By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
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22. Measurement of the associated production of a Z boson with charm or bottom quark jets in proton-proton collisions at  $\sqrt{s}=13$  TeV  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
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23. A deep neural network to search for new long-lived particles decaying to jets  
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Group Author(s): CMS Collaboration  
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24. A deep neural network to search for new long-lived particles decaying to jets  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
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Group Author(s): CMS Collaboration  
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Group Author(s): CMS Collaboration  
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27. Combination of the W boson polarization measurements in top quark decays using ATLAS and CMS data at  $\sqrt{s}=8$  TeV  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration; ATLAS Collaboration; CMS Collaboration  
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By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
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29. Study of central exclusive  $\pi^+ \pi^-$  production in proton-proton collisions at  $\sqrt{s}=5.02$  and 13 TeV  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
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30. Measurements of  $ttH$  Production and the CP Structure of the Yukawa Interaction between the Higgs Boson and Top Quark in the Diphoton Decay Channel  
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Group Author(s): CMS Collaboration  
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Group Author(s): CMS Collaboration  
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Group Author(s): CMS Collaboration  
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Group Author(s): CMS Collaboration  
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By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
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Group Author(s): CMS Collaboration  
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41. A measurement of the Higgs boson mass in the diphoton decay channel  
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Group Author(s): CMS Collaboration  
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Group Author(s): CMS Collaboration  
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Group Author(s): CMS Collaboration  
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Group Author(s): CMS Collaboration  
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46. Determination of the strong coupling constant  $\alpha_s(m_Z)$  from measurements of inclusive  $W^\pm$  and Z boson production cross sections in proton-proton collisions at  $\sqrt{s}=7$  and 8 TeV  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration

47. Measurement of the Jet Mass Distribution and Top Quark Mass in Hadronic Decays of Boosted Top Quarks in pp Collisions at  $\sqrt{s}=13$  TeV  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
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By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
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49. Search for an excited lepton that decays via a contact interaction to a lepton and two jets in proton-proton collisions at  $\sqrt{s}=13$  TeV  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
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By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
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Group Author(s): CMS Collaboration; CMS Collaboration; CMS Collaboration  
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Group Author(s): CMS Collaboration  
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By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.

Group Author(s): CMS Collaboration

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55. Search for heavy Higgs bosons decaying to a top quark pair in proton-proton collisions at  $\sqrt{s}=13$  TeV

By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.

Group Author(s): CMS Collaboration

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Group Author(s): CMS Collaboration

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57. Measurement of the  $t\bar{t}b\bar{b}$  production cross section in the all-jet final state in pp collisions at  $\sqrt{s}=13$  TeV

By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.

Group Author(s): CMS Collaboration

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58. Running of the top quark mass from proton-proton collisions at  $\sqrt{s}=13$  TeV

By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.

Group Author(s): CMS Collaboration

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By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.

Group Author(s): CMS Collaboration

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60. Study of excited  $\Lambda_b^0$  states decaying to  $\Lambda_b^0\pi^+\pi^-$  in proton-proton collisions at  $\sqrt{s}=13$  TeV

By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.

Group Author(s): CMS Collaboration

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61. Search for a Narrow Resonance Lighter than 200 GeV Decaying to a Pair of Muons in Proton-Proton Collisions at  $\sqrt{s}=13$  TeV

By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.

Group Author(s): CMS Collaboration

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62. Experimental study of different silicon sensor options for the upgrade of the CMS Outer Tracker

By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.



Group Author(s): CMS Collaboration

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Group Author(s): CMS Collaboration

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By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.

Group Author(s): CMS Collaboration

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By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.

Group Author(s): CMS Collaboration

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66. A multi-dimensional search for new heavy resonances decaying to boosted WW, WZ, or ZZ boson pairs in the dijet final state at  $13\text{TeV}$

By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.

Group Author(s): CMS Collaboration

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Group Author(s): CMS Collaboration

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68. Observation of the  $\Lambda_0 b \rightarrow J/\psi \Lambda \phi$  decay in proton-proton collisions at  $\sqrt{s}=13\text{ TeV}$

By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.

Group Author(s): CMS Collaboration

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69. Search for physics beyond the standard model in multilepton final states in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$

By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.

Group Author(s): CMS Collaboration

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70. Search for new neutral Higgs bosons through the  $H \rightarrow ZA \rightarrow l^+ l^- b \bar{b}$  process in pp collisions at  $\sqrt{s}=13\text{ TeV}$

By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.

Group Author(s): CMS Collaboration

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71. Measurement of top quark pair production in association with a Z boson in proton-proton collisions at  $\sqrt{s} = 13$  TeV

By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.

Group Author(s): CMS Collaboration

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72. Search for a heavy Higgs boson decaying to a pair of W bosons in proton-proton collisions at  $\sqrt{s} = 13$  TeV

By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.

Group Author(s): The CMS collaboration

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73. Search for dark matter particles produced in association with a Higgs boson in proton-proton collisions at  $\sqrt{s} = 13$  TeV

By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.

Group Author(s): CMS Collaboration

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74. Bose-Einstein correlations of charged hadrons in proton-proton collisions at  $\sqrt{s} = 13$  TeV

By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.

Group Author(s): CMS Collaboration

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By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.

Group Author(s): CMS Collaboration

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76. Measurement of the top quark pair production cross section in dilepton final states containing one tau lepton in pp collisions at  $\sqrt{s} = 13$  TeV

By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.

Group Author(s): CMS Collaboration

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77. Combined search for supersymmetry with photons in proton-proton collisions at  $\sqrt{s} = 13$  TeV

By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.

Group Author(s): CMS Collaboration

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78. Search for top squark pair production in a final state with two tau leptons in proton-proton collisions at  $\sqrt{s}=13$  TeV  
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Group Author(s): CMS Collaboration  
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79. Performance of the reconstruction and identification of high-momentum muons in proton-proton collisions at  $\sqrt{s}=13$  TeV  
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80. Search for production of four top quarks in final states with same-sign or multiple leptons in proton-proton collisions at  $\sqrt{s}=13$  TeV  
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Group Author(s): CMS Collaboration  
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81. Search for Supersymmetry with a Compressed Mass Spectrum in Events with a Soft tau Lepton, a Highly Energetic Jet, and Large Missing Transverse Momentum in Proton-Proton Collisions at  $\sqrt{s}=13$  TeV  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): Cms Collaboration  
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82. Multiparticle correlation studies in pPb collisions  $\sqrt{s_{NN}}=8.16$  TeV  
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Group Author(s): CMS Collaboration  
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Group Author(s): CMS Collaboration  
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84. Evidence for WW production from double-parton interactions in proton-proton collisions at  $\sqrt{s}=13$  TeV  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
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85. Search for a charged Higgs boson decaying into top and bottom quarks in events with electrons or muons in proton-proton collisions at  $\sqrt{s}=13$  TeV  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration

86. 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  $\sqrt{s}=13\text{TeV}$   
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
PHYSICS LETTERS B Volume: 800 Article Number: 135087
87. Measurement of the single top quark and antiquark production cross sections in the t channel and their ratio in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$   
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
PHYSICS LETTERS B Volume: 800 Article Number: 135042
88. Observation of nuclear modifications in  $W^\pm$  boson production in pPb collisions at  $\sqrt{s_{NN}}=8.16\text{TeV}$   
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
PHYSICS LETTERS B Volume: 800 Article Number: 135048
89. Search for electroweak production of a vector-like T quark using fully hadronic final states  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
JOURNAL OF HIGH ENERGY PHYSICS Issue: 1 Article Number: 036
90. Searches for physics beyond the standard model with the  $M_{T2}$  variable in hadronic final states with and without disappearing tracks in proton-proton collisions at  $s=13\text{TeV}$   
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
EUROPEAN PHYSICAL JOURNAL C Volume: 80 Issue: 1 Article Number: 3
91. Extraction and validation of a new set of CMS pythia8 tunes from underlying-event measurements  
By: Sirunyan, A. M.; Tumasyan, A.; Adam, W.; et al.  
Group Author(s): CMS Collaboration  
EUROPEAN PHYSICAL JOURNAL C Volume: 80 Issue: 1 Article Number: 4
92. Search for direct production of electroweakinos in final states with missing transverse momentum and a Higgs boson decaying into photons in pp collisions at  $\sqrt{s}=13\text{TeV}$  with the ATLAS detector  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
JOURNAL OF HIGH ENERGY PHYSICS Issue: 10 Article Number: 005

93. Search for long-lived, massive particles in events with a displaced vertex and a muon with large impact parameter in  $p p$  collisions at  $\sqrt{s}=13$  TeV with the ATLAS detector  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
PHYSICAL REVIEW D Volume: 102 Issue: 3 Article Number: 032006
94. Search for the  $HH \rightarrow bbb^- b^-$  process via vector-boson fusion production using proton-proton collisions at  $\sqrt{s}=13$  TeV with the ATLAS detector  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
JOURNAL OF HIGH ENERGY PHYSICS Issue: 7 Article Number: 108
95. Measurement of isolated-photon plus two-jet production in pp collisions at  $\sqrt{s}=13$  TeV with the ATLAS detector  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
JOURNAL OF HIGH ENERGY PHYSICS Issue: 3 Article Number: 179
96. Search for chargino-neutralino production with mass splittings near the electroweak scale in three-lepton final states in  $\sqrt{s}=13$  TeV pp collisions with the ATLAS detector  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
PHYSICAL REVIEW D Volume: 101 Issue: 7 Article Number: 072001
97. Search for direct stau production in events with two hadronic  $\tau$ -leptons in  $\sqrt{s}=13$  TeV pp collisions with the ATLAS detector  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
PHYSICAL REVIEW D Volume: 101 Issue: 3 Article Number: 032009
98. Measurement of the  $Z(\rightarrow l^+l^-)\gamma$  production cross-section in pp collisions at  $\sqrt{s}=13$  TeV with the ATLAS detector  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
JOURNAL OF HIGH ENERGY PHYSICS Issue: 3 Article Number: 054
99. Measurement of differential cross sections for single diffractive dissociation in  $\sqrt{s}=8$  TeV  $p p$  collisions using the ATLAS ALFA spectrometer  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
JOURNAL OF HIGH ENERGY PHYSICS Issue: 2 Article Number: 042  
JOURNAL OF HIGH ENERGY PHYSICS Issue: 10 Article Number: 182 (erratum)
100. Z boson production in Pb+Pb collisions at  $\sqrt{s_{NN}}=5.02$  TeV measured by the ATLAS experiment  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.

Group Author(s): ATLAS Collaboration  
PHYSICS LETTERS B Volume: 802 Article Number: 135262

101. Determination of jet calibration and energy resolution in proton–proton collisions at  $\sqrt{s}=8$  TeV using the ATLAS detector  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
EUROPEAN PHYSICAL JOURNAL C Volume: 80 Issue: 12 Article Number: 1104
102. Measurement of  $J/\psi$  production in association with a  $W_{\pm}$  boson with p p data at 8 TeV  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
JOURNAL OF HIGH ENERGY PHYSICS Issue: 1 Article Number: 095
103. Search for direct production of electroweakinos in final states with one lepton, missing transverse momentum and a Higgs boson decaying into two b-jets in p p collisions at  $\sqrt{s}=13$  TeV with the ATLAS detector  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
EUROPEAN PHYSICAL JOURNAL C Volume: 80 Issue: 8 Article Number: 691
104. Search for squarks and gluinos in final states with same-sign leptons and jets using 139 fb<sup>-1</sup> of data collected with the ATLAS detector  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
JOURNAL OF HIGH ENERGY PHYSICS Issue: 6 Article Number: 046
105. Combined measurements of Higgs boson production and decay using up to 80 fb<sup>-1</sup> of proton–proton collision data at  $\sqrt{s}=13$  TeV collected with the ATLAS experiment  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
PHYSICAL REVIEW D Volume: 101 Issue: 1 Article Number: 012001
106. Measurement of azimuthal anisotropy of muons from charm and bottom hadrons in pp collisions at  $\sqrt{s}=13$  TeV with the ATLAS detector  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
PHYSICAL REVIEW LETTERS Volume: 124 Issue: 8 Article Number: 082301
107. Search for light long-lived neutral particles produced in pp collisions at  $\sqrt{s}=13$  TeV and decaying into collimated leptons or light hadrons with the ATLAS detector  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
EUROPEAN PHYSICAL JOURNAL C Volume: 80 Issue: 5 Article Number: 450

108. Search for flavour-changing neutral currents in processes with one top quark and a photon using 81 fb<sup>-1</sup> of p p collisions at  $\sqrt{s}=13$  TeV with the ATLAS experiment  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
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109. Search for electroweak production of charginos and sleptons decaying into final states with two leptons and missing transverse momentum in  $\sqrt{s}=13$  TeV p p collisions using the ATLAS detector  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
EUROPEAN PHYSICAL JOURNAL C Volume: 80 Issue: 2 Article Number: 123
110. Search for non-resonant Higgs boson pair production in the  $b\bar{b}'\nu'\nu$  final state with the ATLAS detector in p p collisions at  $\sqrt{s}=13$  TeV  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
PHYSICS LETTERS B Volume: 801 Article Number: 135145
111. Measurement of angular and momentum distributions of charged particles within and around jets in Pb+Pb and p p collisions at  $\sqrt{s_{NN}}=5.02$  TeV with the ATLAS detector  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
PHYSICAL REVIEW C Volume: 100 Issue: 6 Article Number: 064901  
PHYSICAL REVIEW C Volume: 101 Issue: 5 Article Number: 059903 (erratum)
112. Search for displaced vertices of oppositely charged leptons from decays of long-lived particles in p p collisions at  $\sqrt{s}=13$  TeV with the ATLAS detector  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
PHYSICS LETTERS B Volume: 801 Article Number: 135114
113. Searches for lepton-flavour-violating decays of the Higgs boson in  $\sqrt{s}=13$ TeV p p collisions with the ATLAS detector  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
PHYSICS LETTERS B Volume: 800 Article Number: 135069
114. Search for heavy neutral Higgs bosons produced in association with b-quarks and decaying into b-quarks at  $\sqrt{s}=13$  TeV with the ATLAS detector  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
PHYSICAL REVIEW D Volume: 102 Issue: 3 Article Number: 032004
115. Search for diboson resonances in hadronic final states in 139 fb<sup>-1</sup> of p p collisions at  $\sqrt{s}=13$  TeV with the ATLAS detector

- By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
JOURNAL OF HIGH ENERGY PHYSICS Issue: 9 Article Number: 091  
JOURNAL OF HIGH ENERGY PHYSICS Issue: 6 Article Number: 042 (erratum)
116. Measurement of long-range two-particle azimuthal correlations in Z-boson tagged pp collisions at  $\sqrt{s}=8$  and 13 TeV  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
EUROPEAN PHYSICAL JOURNAL C Volume: 80 Issue: 1 Article Number: 64
117. Combination of searches for Higgs boson pairs in p p collisions at  $\sqrt{s}=13$  TeV with the ATLAS detector  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
PHYSICS LETTERS B Volume: 800 Article Number: 135103
118. Search for magnetic monopoles and stable high-electric-charge objects in 13 TeV proton–proton collisions with the ATLAS detector  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
PHYSICAL REVIEW LETTERS Volume: 124 Issue: 3 Article Number: 031802
119. Fluctuations of anisotropic flow in Pb+Pb collisions at  $\sqrt{s_{NN}}=5.02$  TeV with the ATLAS detector  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
JOURNAL OF HIGH ENERGY PHYSICS Issue: 1 Article Number: 051
120. Measurements of top-quark pair spin correlations in the  $e\mu$  channel at  $\sqrt{s}=13$  TeV using  $p p$  collisions in the ATLAS detector  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
EUROPEAN PHYSICAL JOURNAL C Volume: 80 Issue: 8 Article Number: 754
121. Measurement of differential cross sections and  $W^+ / W^-$  cross-section ratios for W boson production in association with jets at  $\sqrt{s}=8$  TeV with the ATLAS detector  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
JOURNAL OF HIGH ENERGY PHYSICS Issue: 5 Article Number: 077
122.  $J/\psi$  elliptic and triangular flow in Pb-Pb collisions at  $\sqrt{s_{NN}}=5.02$  TeV  
By: Acharya, S.; Adamova, D.; Adler, A.; et al.  
Group Author(s): ALICE Collaboration  
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123. Elliptic and triangular flow of (anti)deuterons in Pb-Pb collisions at  $\sqrt{s_{NN}}=5.02$  TeV  
By: Acharya, S.; Adamova, D.; Adler, A.; et al.  
Group Author(s): ALICE Collaboration  
PHYSICAL REVIEW C Volume: 102 Issue: 5 Article Number: 055203
124. Measurement of isolate photon-hadron correlation in  $\sqrt{s_{NN}}=5.02$  TeV pp and p-Pb collisions  
By: Acharya, S.; Adamova, D.; Adler, A.; et al.  
Group Author(s): ALICE Collaboration  
PHYSICAL REVIEW C Volume: 102 Issue: 4 Article Number: 044908
125. Production of  $\omega$  mesons in pp collisions at  $\sqrt{s}=7$  TeV  
By: Acharya, S.; Adamova, D.; Adler, A.; et al.  
Group Author(s): ALICE Collaboration  
EUROPEAN PHYSICAL JOURNAL C Volume: 80 Issue: 12 Article Number: 1130
126. Constraining the Chiral Magnetic Effect with charge-dependent azimuthal correlations in Pb-Pb collisions at  $\sqrt{s_{NN}}=2.76$  and 5.02 TeV  
By: Acharya, S.; Adamova, D.; Adler, A.; et al.  
Group Author(s): ALICE Collaboration  
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127. Dielectron production in proton-proton and proton-lead collisions at  $\sqrt{s_{NN}} = 5.02$  TeV  
By: Acharya, S.; Adamova, D.; Adler, A.; et al.  
Group Author(s): ALICE Collaboration  
PHYSICAL REVIEW C Volume: 102, Issue: 5, Article Number: 055204
128. Z-boson production in p-Pb collisions at  $\sqrt{s_{NN}}=8.16$  TeV and Pb-Pb collisions at  $\sqrt{s_{NN}}=5.02$  TeV  
By: Acharya, S.; Adamova, D.; Adler, A.; et al.  
Group Author(s): ALICE Collaboration  
JOURNAL OF HIGH ENERGY PHYSICS Issue: 9 Article Number: 076
129. Multiplicity dependence of  $J/\psi$  production at midrapidity in pp collisions at  $\sqrt{s}=13$  TeV  
By: Acharya, S.; Adamova, D.; Adler, A.; et al.  
Group Author(s): ALICE Collaboration  
PHYSICS LETTERS B Volume: 810 Article Number: 135758
130. Measurement of the low-energy antideuteron inelastic cross section  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
PHYSICAL REVIEW LETTERS Volume: 125 Issue: 16 Article Number: 162001
131.  $J/\psi$  production as a function of charged-particle multiplicity in p-Pb collisions at  $\sqrt{s_{NN}}= 8.16$  TeV  
By: Acharya, S.; Adamova, D.; Adler, A.; et al.

Group Author(s): ALICE Collaboration  
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132. Search for a common baryon source in high-multiplicity pp collisions at the LHC

By: Acharya, S.; Adamova, D.; Adler, A.; et al.

Group Author(s): ALICE Collaboration

PHYSICS LETTERS B Volume: 811 Article Number: 135849

133. Measurement of nuclear effects on  $\psi(2S)$  production in p–Pb collisions at  $\sqrt{s_{NN}}=8.16$  TeV

By: Acharya, S.; Adamova, D.; Adler, A.; et al.

Group Author(s): ALICE Collaboration

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134. (Anti-)Deuteron production in pp collisions at  $\sqrt{s} = 13$  TeV

By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.

Group Author(s): ATLAS Collaboration

EUROPEAN PHYSICAL JOURNAL C Volume: 80 Issue: 9 Article Number: 889

135. Multiplicity dependence of  $\pi$ , K, and p production in pp collisions at  $\sqrt{s}=13$  TeV

By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.

Group Author(s): ATLAS Collaboration

EUROPEAN PHYSICAL JOURNAL C Volume: 80 Issue: 8 Article Number: 693

136. Coherent photoproduction of  $\rho^0$  vector mesons in ultra-peripheral Pb–Pb collisions at  $\sqrt{s_{NN}}=5.02$  TeV

By: Acharya, S.; Adamova, D.; Adler, A.; et al.

Group Author(s): ALICE Collaboration

JOURNAL OF HIGH ENERGY PHYSICS Issue: 6 Article Number: 035

137. Higher harmonic non-linear flow modes of charged hadrons in Pb–Pb collisions at  $\sqrt{s_{NN}}=5.02$  TeV

By: Acharya, S.; Adamova, D.; Adler, A.; et al.

Group Author(s): ALICE Collaboration

JOURNAL OF HIGH ENERGY PHYSICS Issue: 5 Article Number: 085

138. Non-linear flow modes of identified particles in Pb–Pb collisions at  $\sqrt{s_{NN}}=5.02$  TeV

By: Acharya, S.; Adamova, D.; Adler, A.; et al.

Group Author(s): ALICE Collaboration

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139. Investigation of the p– $\Sigma^0$  interaction via femtoscopy in pp collisions

By: Acharya, S.; Adamova, D.; Adler, A.; et al.

Group Author(s): ALICE Collaboration

PHYSICS LETTERS B Volume: 805 Article Number: 135419

140. Production of (anti-)<sup>3</sup>He and (anti-)<sup>3</sup>H in p–Pb collisions at  $\sqrt{s_{NN}}=5.02$  TeV  
By: Acharya, S.; Adamova, D.; Adler, A.; et al.  
Group Author(s): ALICE Collaboration  
PHYSICAL REVIEW C Volume: 102 Issue: 4 Article Number: 044906
141. Underlying Event properties in pp collisions at  $\sqrt{s} = 13$  TeV  
By: Acharya, S.; Adamova, D.; Adler, A.; et al.  
Group Author(s): ALICE Collaboration  
JOURNAL OF HIGH ENERGY PHYSICS Issue: 4 Article Number: 192
142. Evidence of rescattering effect in Pb–Pb collisions at the LHC through production of  $K^*(892)^0$  and  $\phi(1020)$  mesons  
By: Acharya, S.; Adamova, D.; Adler, A.; et al.  
Group Author(s): ALICE Collaboration  
PHYSICS LETTERS B Volume: 802 Article Number: 135225
143. Longitudinal and azimuthal evolution of two-particle transverse momentum correlations in Pb–Pb collisions at  $\sqrt{s_{NN}}=2.76$  TeV  
By: Acharya, S.; Adamova, D.; Adler, A.; et al.  
Group Author(s): ALICE Collaboration  
PHYSICS LETTERS B Volume: 804 Article Number: 135375
144. Centrality and transverse momentum dependence of inclusive  $J/\psi$  production at midrapidity in Pb–Pb collisions at  $\sqrt{s_{NN}}=5.02$  TeV  
By: Acharya, S.; Adamova, D.; Adler, A.; et al.  
Group Author(s): ALICE Collaboration  
PHYSICS LETTERS B Volume: 805 Article Number: 135434
145. Measurement of electrons from heavy-flavour hadron decays as a function of multiplicity in p–Pb collisions at  $\sqrt{s_{NN}}=5.02$  TeV  
By: Acharya, S.; Adamova, D.; Adler, A.; et al.  
Group Author(s): ALICE Collaboration  
JOURNAL OF HIGH ENERGY PHYSICS Issue: 2 Article Number: 077
146. Probing the effects of strong electromagnetic fields with charge-dependent directed flow in Pb–Pb collisions at the LHC  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ALICE Collaboration  
PHYSICAL REVIEW LETTERS Volume: 125 Issue: 2 Article Number: 022301
147. Azimuthal correlations of prompt D mesons with charged particles in pp and p–Pb collisions at  $\sqrt{s_{NN}}=5.02$  TeV  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ATLAS Collaboration  
EUROPEAN PHYSICAL JOURNAL C Volume: 80 Issue: 10 Article Number: 979

148. Jet-hadron correlations measured relative to the second order event plane in Pb–Pb collisions at  $\sqrt{s_{NN}}=2.76$  TeV  
By: Acharya, S.; Adamova, D.; Adler, A.; et al.  
Group Author(s): ALICE Collaboration  
PHYSICAL REVIEW C Volume: 101 Issue: 6 Article Number: 064901
149. Multiplicity dependence of  $K^*(892)^0$  and  $\phi(1020)$  production in pp collisions at  $\sqrt{s}=13$  TeV  
By: Acharya, S.; Adamova, D.; Adler, A.; et al.  
Group Author(s): ALICE Collaboration  
PHYSICS LETTERS B Volume: 807 Article Number: 135501
150.  $\Upsilon$  production in p–Pb collisions at  $\sqrt{s_{NN}}=8.16$  TeV  
By: Acharya, S.; Adamova, D.; Adler, A.; et al.  
Group Author(s): ALICE Collaboration  
PHYSICS LETTERS B Volume: 806 Article Number: 135486
151. Measurement of spin-orbital angular momentum interactions in relativistic heavy-ion collisions  
By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.  
Group Author(s): ALICE Collaboration  
PHYSICAL REVIEW LETTERS Volume: 125 Issue: 1 Article Number: 012301
152. Global baryon number conservation encoded in net-proton fluctuations measured in Pb–Pb collisions at  $\sqrt{s_{NN}}=2.76$  TeV  
By: Acharya, S.; Adamova, D.; Adler, A.; et al.  
Group Author(s): ALICE Collaboration  
PHYSICS LETTERS B Volume: 807 Article Number: 135564
153.  $K^*(892)^0$  and  $\phi(1020)$  production at midrapidity in pp collisions at  $\sqrt{s} = 8$  TeV  
By: Acharya, S.; Adamova, D.; Adler, A.; et al.  
Group Author(s): ALICE Collaboration  
PHYSICAL REVIEW C Volume: 102 Issue: 2 Article Number: 024912
154. Measurement of electrons from semileptonic heavy-flavour hadron decays at midrapidity in pp and Pb–Pb collisions at  $\sqrt{s_{NN}}=5.02$  TeV  
By: Acharya, S.; Adamova, D.; Adler, A.; et al.  
Group Author(s): ALICE Collaboration  
PHYSICS LETTERS B Volume: 804 Article Number: 135377
155. Measurement of the (anti-) $^3\text{He}$  elliptic flow in Pb–Pb collisions at  $\sqrt{s_{NN}}=5.02$  TeV  
By: Acharya, S.; Adamova, D.; Adler, A.; et al.  
Group Author(s): ALICE Collaboration  
PHYSICS LETTERS B Volume: 805 Article Number: 135414
156. Production of charged pions, kaons and (anti-)protons in Pb–Pb and inelastic pp

collisions at  $\sqrt{s_{NN}}=5.02$  TeV

By: Acharya, S.; Adamova, D.; Adler, A.; et al.

Group Author(s): ALICE Collaboration

PHYSICAL REVIEW C Volume: 101 Issue: 4 Article Number: 044907

157. Measurements of inclusive jet spectra in pp and central Pb–Pb collisions at  $\sqrt{s_{NN}}=5.02$  TeV

By: Acharya, S.; Adamova, D.; Adler, A.; et al.

Group Author(s): ALICE Collaboration

PHYSICAL REVIEW C Volume: 101 Issue: 3 Article Number: 034911

158. Studies of  $J/\psi$  production at forward rapidity in Pb–Pb collisions at  $\sqrt{s_{NN}}=5.02$  TeV

By: Acharya, S.; Adamova, D.; Adler, A.; et al.

Group Author(s): ALICE Collaboration

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159. Global polarization of  $\Lambda$  and  $\Lambda$  hyperons in Pb–Pb collisions at the LHC

By: Acharya, S.; Adamova, D.; Adler, A.; et al.

Group Author(s): ALICE Collaboration

PHYSICAL REVIEW C Volume: 101 Issue: 4 Article Number: 044611

160. Measurement of  $\Lambda(1520)$  production in pp collisions at  $\sqrt{s}=7$  TeV and p–Pb collisions at  $\sqrt{s_{NN}}=5.02$  TeV

By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.

Group Author(s): ATLAS Collaboration

EUROPEAN PHYSICAL JOURNAL C Volume: 80 Issue: 2 Article Number: 160

161. Multiplicity dependence of (multi-)strange hadron production in proton-proton collisions at  $\sqrt{s}=13$  TeV

By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.

Group Author(s): ATLAS Collaboration

EUROPEAN PHYSICAL JOURNAL C Volume: 80 Issue: 2 Article Number: 167

162. Multiplicity dependence of light (anti-)nuclei production in p–Pb collisions at  $\sqrt{s_{NN}}=5.02$  TeV

By: Acharya, S.; Adamova, D.; Adler, A.; et al.

Group Author(s): ALICE Collaboration

PHYSICS LETTERS B Volume: 800 Article Number: 135043

163. Scattering studies with low-energy kaon-proton femtoscopy in proton–proton collisions at the LHC

By: Aad, G.; Abbott, B.; Abbott, D. C.; et al.

Group Author(s): ALICE Collaboration

PHYSICAL REVIEW LETTERS Volume: 124 Issue: 9 Article Number: 092301

164. Exploration of jet substructure using iterative declustering in pp and Pb–Pb collisions at LHC energies  
By: Acharya, S.; Adamova, D.; Adler, A.; et al.  
Group Author(s): ALICE Collaboration  
PHYSICS LETTERS B Volume: 802 Article Number: 135227
165. Measurement of strange baryon–antibaryon interactions with femtoscopic correlations  
By: Acharya, S.; Adamova, D.; Adler, A.; et al.  
Group Author(s): ALICE Collaboration  
PHYSICS LETTERS B Volume: 802 Article Number: 135223
166. Precision measurement of the neutral pion lifetime  
By: Larin, I; et al.  
Group Authors: PrimEx-II Collaboration  
SCIENCE Volume: 368 Issue: 6490 Article Number: 506
167. Deeply virtual Compton scattering off the neutron  
By: Benali, M; desnault, C; Mazouz, M; et al.  
NATURE PHYS. Volume: 16 Issue: 2 Article Number: 191
168. Beam–target helicity asymmetry E in  $K^+\Sigma^-$  photoproduction on the neutron  
By: Zachariou, N.; Watts, D. P.; Fleming, J.; et al.  
Group Author(s): Jefferson Lab CLAS Collaboration  
PHYSICS LETTERS B Volume: 808 Article Number: 135662
169. Extraction of Beam-Spin Asymmetries from the Hard Exclusive  $\pi^+$  Channel off Protons in a Wide Range of Kinematics  
By: Diehl, S.; Joo, K.; Kim, A.; et al.  
Group Author(s): Jefferson Lab CLAS Collaboration  
PHYSICAL REVIEW LETTERS Volume: 125 issue: 18 Article Number: 182001
170. Probing the core of the strong nuclear interaction  
By: Schmidt, A.; Pybus, J. R.; Weiss, R.; et al.  
Group Author(s): Jefferson Lab CLAS Collaboration  
NATURE Volume: 578 Issue: 7796 Article Number: 540
171. First measurement of direct photoproduction of the  $a_2(1320)^0$  meson on the proton  
By: Celentano, A.; Battaglieri, M.; De Vita, R.; et al.  
Group Author(s): Jefferson Lab CLAS Collaboration  
PHYSICAL REVIEW C Volume: 102 Issue: 3, Article Number: 032201
172. The CLAS12 Spectrometer at Jefferson Laboratory  
By: Burkert, V. D.; Elouadrhiri, L.; Adhikari, K. P.; et al.  
Group Author(s): Jefferson Lab CLAS Collaboration  
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173. The CLAS12 beamline and its performance  
By: Baltzell, N.; Burkert, V. D.; Carvajal, J.; et al.  
Group Author(s): Jefferson Lab CLAS Collaboration  
NUCLEAR INSTRUMENTS METHODS A Volume: 959 Article Number: 163421
174. The CLAS12 forward electromagnetic calorimeter  
By: Asryan, G.; Chandavar, Sh.; Chetry, T.; et al.  
Group Author(s): Jefferson Lab CLAS Collaboration  
NUCLEAR INSTRUMENTS METHODS A Volume: 959 Article Number: 163425
175. Exclusive  $\pi^0 p$  electroproduction off protons in the resonance region at photon virtualities  $0.4 \text{ GeV}^2 \leq Q^2 \leq 1 \text{ GeV}^2$   
By: Markov, N.; Joo, K.; Burkert, V. D.; et al.  
PHYSICAL REVIEW C Volume: 101 Issue: 1 Article Number: 015208
176. Parity-Violating Inelastic Electron-Proton Scattering at Low  $Q^2$  Above the Resonance Region  
By: Androic, D.; Armstrong, D. S.; Asaturyan, A.; et al.  
Group author(s): Qweak Collaboration  
PHYSICAL REVIEW C Volume: 101 Issue: Article Number: 055603
177. Scintillating crystals for the Neutral Particle Spectrometer in Hall C at JLab  
By: Horn T.; Berdnikov, V. V.; Ali, S.; et al.  
Group author(s): NPS Collaboration  
NUCLEAR INSTRUMENTS METHODS A Volume: 956 Article Number: 163375
178. Proton Form Factor Ratio  $\mu_p G_{EP} / G_{MP}$  from Double Spin Asymmetry  
By: Liyanage, A; Armstrong, W.; Kang, H.; et al.  
Group Author(s): SANE Collaboration  
PHYSICAL REVIEW C Volume: 101 Issue: 3 Article Number: 035206
179. Precision Measurement of the Beam-Normal Single-Spin Asymmetry in Forward-Angle Elastic Electron-Proton Scattering  
By: Androic, D.; Armstrong, D. S.; Asaturyan, A.; et al.  
Group author(s): Qweak Collaboration  
PHYSICAL REVIEW LETTERS Volume: 101 Issue: 5 Article Number: 112502
180. The GlueX beamline and detector  
By: Adhikari, S.; Akondi, C.; Ghoul, H.; et al.  
Group author(s): JLab Hall D, GlueX Collaboration.  
NUCLEAR INSTRUMENTS METHODS A Volume: 987 Article Number: 164807
181. Measurement of the photon beam asymmetry in  $\gamma + p \rightarrow K + \Sigma^0$  at  $E_\gamma = 8.5 \text{ GeV}$   
By: Adhikari, S.; Ali, A.; Amarian, M.;  
Group author(s): JLab Hall D, GlueX Collaboration.

182. Resolving acceleration to very high energies along the jet Centaurus A.  
By: H. Abdalla, R. Adam, F. Aharonian et al.  
Group Author(s): HESS Collaboration  
NATURE, Volume 582, Pages: 356–359.
183. Search for dark matter signals towards a selection of recently-detected DES dwarf galaxy satellites of the Milky Way with H.E.S.S.  
By: H. Abdalla, R. Adam, F. Aharonian et al.  
Group Author(s): HESS Collaboration  
PHYSICAL REVIEW D Volume: 102 Issue: 6 Article Number: 062001
184. Probing the magnetic field in the GW170817 outflow using H.E.S.S. observations  
By: H. Abdalla, R. Adam, F. Aharonian et al.  
Group Author(s): HESS Collaboration  
ASTROPHYSICS LETTER Volume: 894 Issue: 2 Article Number: L16
185. Very high energy  $\gamma$ -ray emission from two blazars of unknown redshift and upper limits on their distance  
By: H. Abdalla, R. Adam, F. Aharonian et al.  
Group Author(s): HESS Collaboration  
MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY,  
Volume: 494, Issue: 4 Pages: 5590-5602
186. Detection of very-high-energy  $\gamma$ -ray emission from the colliding wind binary  $\eta$  Car with H.E.S.S.  
By: H. Abdalla, R. Adam, F. Aharonian et al.  
Group Author(s): HESS Collaboration  
ASTRONOMY & ASTROPHYSICS, Volume 635: Article Number: A167
187. Simultaneous observations of the blazar PKS 2155-304 from Ultra-Violet to TeV energies  
By: H. Abdalla, R. Adam, F. Aharonian et al.  
Group Author(s): HESS Collaboration  
ASTRONOMY & ASTROPHYSICS, Volume 639: Article Number: A42
188. H.E.S.S. and Fermi-LAT observations of PSR B1259–63/ LS 2883 during its 2014 and 2017 periastron passages  
By: H. Abdalla, R. Adam, F. Aharonian et al.  
Group Author(s): HESS Collaboration  
ASTRONOMY & ASTROPHYSICS, Volume 633: Article Number: A102



189. H.E.S.S. detection of very-high-energy  $\gamma$ -ray emission from the quasar PKS 0736+017  
By: H. Abdalla, R. Adam, F. Aharonian et al.  
Group Author(s): HESS Collaboration  
ASTRONOMY & ASTROPHYSICS, Volume 633: Article Number: A162
190. Azimuthal single- and double-spin asymmetries in semi-inclusive deep-inelastic lepton scattering by transversely polarized protons  
By: A. Airapetian, N. Akopov, ... , H. Marukyan et al.  
Group Author(s): HERMES Collaboration  
JOURNAL OF HIGH ENERGY PHYSICS Issue: 10 Article Number: 012
191. Overview of recent HERMES  
Hrachya Marukyan  
JOURNAL Physics. CONFERENCE SERIES Volume: 1435 Issue: 1 Article Number: 012041
192. А.Э. Аветисян, Р.В. Аветисян, А.Г. Барсегян, Ю.А. Гарибян, А.В. Гюрджинян, Р.К. Даллакян, И.А. Керобян, А.А. Мкртчян «Исследование средневзвешенных сечений для реакций на  $^{93}\text{Nb}$  на тормозном пучке ЛУЭ-75» Ядерная физика, том 84, No. 2, стр. 1-6, 2021.
193. A.R. Balabekyan et al., “Study of formation of alpha particles in photonuclear reactions at the energy of photons 20 and 40 MeV”, Journal of Contemporary Physics (Armenian Academy of Sciences), 2020, Vol. 55, No. 1, pp. 1- 7.
194. A.S. Hakobyan et al., “A study of reactions of one or more neutron photoemission from bismuth“, Journal of Contemporary Physics (Armenian Academy of Sciences), 2020, Vol. 55, No. 2, pp. 111- 117.
195. Tigran V. Kotanjyan, Hovhannes Kh. Tevosyan, “Optical absorption and photoluminescence of cylindrical quantum dot with Modified Pöschl-Teller and Morse confining potentials“, International Youth Conference on Electronics, Telecommunications and Information Technologies. Springer Proceedings in Physics, vol 255, pp. 65-77 (2020).