

Papers by TSU Node 2018

1. **“Deuteron analysing powers in deuteronproton elastic scattering at 1.2 and 2.27 GeV”**
D. Mchedlishvili *et al.* by ANKE Collaboration
arXiv:1805.05778 [nucl-ex]
DOI:10.1016/j.nuclphysa.2018.05.006
Nucl. Phys. A **977**, 14 (2018)
2. **“Phase Measurement for Driven Spin Oscillations in a Storage Ring”**
N. Hempelmann ..., D. Mchedlishvili, G. Macharashvili, N. Lomidze, M. Tabidze, ..., *et al.* by JEDI Collaboration.
arXiv:1801.03445 [physics.acc-ph]
DOI:10.1103/PhysRevAccelBeams.21.042002
Phys. Rev. Accel. Beams **21**, no. 4, 042002 (2018), [Phys. Rev. Accel. Beams. **21**, 042002 (2018)]
3. **“Feasibility Study for an EDM Storage Ring”**
F. Abusaif, ..., D. Mchedlishvili, G. Macharashvili, N. Lomidze, M. Tabidze, ..., *et al.* by JEDI Collaboration.
arXiv:1812.08535 [physics.acc-ph]
4. **“Sensitivity of the KM3NeT/ARCA neutrino telescope to point-like neutrino sources”**
S. Aiello *et al.* [KM3NeT Collaboration].
arXiv:1810.08499 [astro-ph.HE]
5. **“Characterisation of the Hamamatsu photomultipliers for the KM3NeT Neutrino Telescope”**
S. Aiello *et al.* [KM3NeT Collaboration].
DOI:10.1088/1748-0221/13/05/P05035
JINST **13**, no. 05, P05035 (2018).
6. **“Electroweak Phase Transitions in Einstein’s Static Universe”**
M. Gogberashvili.
arXiv:1702.08445 [gr-qc]
DOI:10.1155/2018/4653202
Adv. High Energy Phys. **2018**, 4653202 (2018)
7. **“Supplying Dark Energy from Scalar Field Dark Matter”**
M. Gogberashvili and A. S. Sakharov.
arXiv:1702.05757 [astro-ph.CO]
DOI:10.1142/S0218271818501006
Int. J. Mod. Phys. D **27**, no. 09, 1850100 (2018)
8. **“Black Hole Information Problem and Wave Bursts”**
M. Gogberashvili and L. Pantskhava.
arXiv:1608.04595 [physics.gen-ph]
DOI:10.1007/s10773-018-3702-x
Int. J. Theor. Phys. **57**, no. 6, 1763 (2018)
9. **“Thermodynamic properties of DNA-dendrimer complexes and features of their applications.”**
T. Mdzinarashvili, M. Khvedelidze, E. Shekiladze, N. Shengelia, T. Hianik
DOI:10.4149/gpb-2018031.
Gen Physiol Biophys Vol. **37**, No. 5 (2018)

10. “Light Pseudo-Goldstone Higgs Boson from $SO(10)$ GUT with Realistic Phenomenology”
 Z. Tavartkiladze.
 arXiv:1803.11164 [hep-ph]
 DOI:10.1103/PhysRevD.98.015013
 Phys. Rev. D **98**, no. 1, 015013 (2018)
11. “Texture Zero Neutrino Models and Their Connection with Resonant Leptogenesis”
 A. Achelashvili and Z. Tavartkiladze.
 arXiv:1710.10955 [hep-ph]
 DOI:10.1016/j.nuclphysb.2018.02.001
 Nucl. Phys. B **929**, 21 (2018)
 CERN-TH-2017-202
12. “A search for pairs of highly collimated photon-jets in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector”
 M. Aaboud *et al.* [ATLAS Collaboration].
 arXiv:1808.10515 [hep-ex]
 Submitted to: Phys.Rev.
 CERN-EP-2018-143
13. “Search for doubly charged scalar bosons decaying into same-sign W boson pairs with the ATLAS detector”
 M. Aaboud *et al.* [ATLAS Collaboration].
 arXiv:1808.01899 [hep-ex]
 Submitted to: Eur.Phys.J.
 CERN-EP-2018-188
14. “Search for squarks and gluinos in final states with hadronically decaying τ -leptons, jets, and missing transverse momentum using pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector”
 M. Aaboud *et al.* [ATLAS Collaboration].
 arXiv:1808.06358 [hep-ex]
 Submitted to: Phys.Rev.
 CERN-EP-2018-185
15. “A search for resonant and non-resonant Higgs boson pair production in the $b\bar{b}\tau^+\tau^-$ decay channel in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector”
 M. Aaboud *et al.* [ATLAS Collaboration].
 arXiv:1808.00336 [hep-ex]
 Submitted to: Phys.Rev.Lett.
 CERN-EP-2018-164
16. “Search for vector-boson resonances decaying to a top quark and bottom quark in the lepton plus jets final state in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector”
 M. Aaboud *et al.* [ATLAS Collaboration].
 arXiv:1807.10473 [hep-ex]
 Submitted to: Phys.Lett.
 CERN-EP-2018-142
17. “In situ calibration of large- R jet energy and mass in 13 TeV proton-proton collisions with the ATLAS detector”
 M. Aaboud *et al.* [ATLAS Collaboration].
 arXiv:1807.09477 [hep-ex]
 Submitted to: Eur.Phys.J.
 CERN-EP-2018-191
18. “Search for Higgs bosons produced via vector-boson fusion and decaying into bottom quark pairs in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector”
 M. Aaboud *et al.* [ATLAS Collaboration].
 arXiv:1807.08639 [hep-ex]

19. “**Search for Higgs boson pair production in the $\gamma\gamma WW^*$ channel using pp collision data recorded at $\sqrt{s} = 13$ TeV with the ATLAS detector**”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1807.08567 [hep-ex]
Submitted to: Eur.Phys.J.
CERN-EP-2018-104
20. “**A strategy for a general search for new phenomena using data-derived signal regions and its application within the ATLAS experiment**”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1807.07447 [hep-ex]
Submitted to: Eur.Phys.J.
CERN-EP-2018-070
21. “**Search for lepton-flavor violation in different-flavor, high-mass final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector**”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1807.06573 [hep-ex]
Submitted to: Phys.Rev.
CERN-EP-2018-137
22. “**Probing the quantum interference between singly and doubly resonant top-quark production in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector**”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1806.04667 [hep-ex]
Submitted to: Phys.Rev.Lett.
CERN-EP-2018-087
23. “**Search for pair production of higgsinos in final states with at least three b -tagged jets in $\sqrt{s} = 13$ TeV pp collisions using the ATLAS detector**”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1806.04030 [hep-ex]
Submitted to: Phys.Rev.
CERN-EP-2018-050
24. “**Observation of Higgs boson production in association with a top quark pair at the LHC with the ATLAS detector**”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1806.00425 [hep-ex]
DOI:10.1016/j.physletb.2018.07.035
Phys. Lett. B **784**, 173 (2018)
CERN-EP-2018-138
25. “**Measurement of the Higgs boson mass in the $H \rightarrow ZZ^* \rightarrow 4\ell$ and $H \rightarrow \gamma\gamma$ channels with $\sqrt{s} = 13$ TeV pp collisions using the ATLAS detector**”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1806.00242 [hep-ex]
DOI:10.1016/j.physletb.2018.07.050
Phys. Lett. B **784**, 345 (2018)
CERN-EP-2018-085
26. “**Search for new phenomena using the invariant mass distribution of same-flavour opposite-sign dilepton pairs in events with missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector**”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1805.11381 [hep-ex]

27. “**Combined measurement of differential and total cross sections in the $H \rightarrow \gamma\gamma$ and the $H \rightarrow ZZ^* \rightarrow 4\ell$ decay channels at $\sqrt{s} = 13$ TeV with the ATLAS detector**”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1805.10197 [hep-ex]
DOI:10.1016/j.physletb.2018.09.019
CERN-EP-2018-080
28. “**Search for resonances in the mass distribution of jet pairs with one or two jets identified as b -jets in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector**”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1805.09299 [hep-ex]
DOI:10.1103/PhysRevD.98.032016
Phys. Rev. D **98**, 032016 (2018)
CERN-EP-2018-075
29. “**Measurement of jet fragmentation in Pb+Pb and pp collisions at $\sqrt{s_{NN}} = 5.02$ TeV with the ATLAS detector**”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1805.05424 [nucl-ex]
DOI:10.1103/PhysRevC.98.024908
Phys. Rev. C **98**, no. 2, 024908 (2018)
CERN-EP-2018-096
30. “**Prompt and non-prompt J/ψ and $\psi(2S)$ suppression at high transverse momentum in 5.02 TeV Pb+Pb collisions with the ATLAS experiment**”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1805.04077 [nucl-ex]
DOI:10.1140/epjc/s10052-018-6219-9
Eur. Phys. J. C **78**, no. 9, 762 (2018)
CERN-EP-2018-049
31. “**Search for flavor-changing neutral currents in top quark decays $t \rightarrow Hc$ and $t \rightarrow Hu$ in multilepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector**”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1805.03483 [hep-ex]
DOI:10.1103/PhysRevD.98.032002
Phys. Rev. D **98**, no. 3, 032002 (2018)
CERN-EP-2018-067
32. “**Search for heavy resonances decaying to a photon and a hadronically decaying $Z/W/H$ boson in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector**”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1805.01908 [hep-ex]
DOI:10.1103/PhysRevD.98.032015
Phys. Rev. D **98**, no. 3, 032015 (2018)
CERN-EP-2018-055
33. “**Measurements of b-jet tagging efficiency with the ATLAS detector using $t\bar{t}$ events at $\sqrt{s} = 13$ TeV**”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1805.01845 [hep-ex]
DOI:10.1007/JHEP08(2018)089
JHEP **1808**, 089 (2018)
CERN-EP-2018-047

34. “Search for heavy particles decaying into top-quark pairs using lepton-plus-jets events in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1804.10823 [hep-ex]
DOI:10.1140/epjc/s10052-018-5995-6
Eur. Phys. J. C **78**, no. 7, 565 (2018)
CERN-EP-2018-48, CERN-EP-2018-048
35. “A search for lepton-flavor-violating decays of the Z boson into a τ -lepton and a light lepton with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1804.09568 [hep-ex]
Submitted to: Phys. Rev.
CERN-EP-2018-052
36. “Search for R-parity-violating supersymmetric particles in multi-jet final states produced in $p\text{-}p$ collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector at the LHC”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1804.03568 [hep-ex]
DOI:10.1016/j.physletb.2018.08.021
Phys. Lett. B **785**, 136 (2018)
CERN-EP-2017-298
37. “Search for supersymmetry in events with four or more leptons in $\sqrt{s} = 13$ TeV pp collisions with ATLAS”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1804.03602 [hep-ex]
DOI:10.1103/PhysRevD.98.032009
Phys. Rev. D **98**, no. 3, 032009 (2018)
CERN-EP-2017-300
38. “Search for low-mass dijet resonances using trigger-level jets with the ATLAS detector in pp collisions at $\sqrt{s} = 13$ TeV”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1804.03496 [hep-ex]
DOI:10.1103/PhysRevLett.121.081801
Phys. Rev. Lett. **121**, no. 8, 081801 (2018)
CERN-EP-2018-033
39. “Search for a heavy Higgs boson decaying into a Z boson and another heavy Higgs boson in the $\ell\ell bb$ final state in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1804.01126 [hep-ex]
DOI:10.1016/j.physletb.2018.07.006
Phys. Lett. B **783**, 392 (2018)
CERN-EP-2018-030
40. “Search for Higgs boson decays into pairs of light (pseudo)scalar particles in the $\gamma\gamma jj$ final state in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1803.11145 [hep-ex]
DOI:10.1016/j.physletb.2018.06.011
Phys. Lett. B **782**, 750 (2018)
CERN-EP-2017-295
41. “Search for top squarks decaying to tau sleptons in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1803.10178 [hep-ex]
DOI:10.1103/PhysRevD.98.032008

42. “Search for flavour-changing neutral current top-quark decays $t \rightarrow qZ$ in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1803.09923 [hep-ex]
DOI:10.1007/JHEP07(2018)176
JHEP **1807**, 176 (2018)
CERN-EP-2018-018
43. “Search for pair production of up-type vector-like quarks and for four-top-quark events in final states with multiple b -jets with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1803.09678 [hep-ex]
DOI:10.1007/JHEP07(2018)089
JHEP **1807**, 089 (2018)
CERN-EP-2018-031
44. “Search for the Decay of the Higgs Boson to Charm Quarks with the ATLAS Experiment”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1802.04329 [hep-ex]
DOI:10.1103/PhysRevLett.120.211802
Phys. Rev. Lett. **120**, no. 21, 211802 (2018)
CERN-EP-2017-334
45. “Measurements of Higgs boson properties in the diphoton decay channel with 36 fb^{-1} of pp collision data at $\sqrt{s} = 13$ TeV with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1802.04146 [hep-ex]
DOI:10.1103/PhysRevD.98.052005
Phys. Rev. D **98**, 052005 (2018)
CERN-EP-2017-288, CERN-EP-2017-288
46. “Search for Higgs boson decays to beyond-the-Standard-Model light bosons in four-lepton events with the ATLAS detector at $\sqrt{s} = 13$ TeV”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1802.03388 [hep-ex]
DOI:10.1007/JHEP06(2018)166
JHEP **1806**, 166 (2018)
CERN-EP-2017-293
47. “Search for photonic signatures of gauge-mediated supersymmetry in 13 TeV pp collisions with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1802.03158 [hep-ex]
DOI:10.1103/PhysRevD.97.092006
Phys. Rev. D **97**, no. 9, 092006 (2018)
CERN-EP-2017-323
48. “Search for a Structure in the $B_s^0\pi^\pm$ Invariant Mass Spectrum with the ATLAS Experiment”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1802.01840 [hep-ex]
DOI:10.1103/PhysRevLett.120.202007
Phys. Rev. Lett. **120**, no. 20, 202007 (2018)
CERN-EP-2017-333
49. “Search for $W' \rightarrow tb$ decays in the hadronic final state using pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector”

- M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1801.07893 [hep-ex]
DOI:10.1016/j.physletb.2018.03.036
Phys. Lett. B **781**, 327 (2018)
CERN-EP-2017-340
50. “Measurements of $t\bar{t}$ differential cross-sections of highly boosted top quarks decaying to all-hadronic final states in pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1801.02052 [hep-ex]
DOI:10.1103/PhysRevD.98.012003
Phys. Rev. D **98**, no. 1, 012003 (2018)
CERN-EP-2017-226
51. “Measurement of the cross section for isolated-photon plus jet production in pp collisions at $\sqrt{s} = 13$ TeV using the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1801.00112 [hep-ex]
DOI:10.1016/j.physletb.2018.03.035
Phys. Lett. B **780**, 578 (2018)
CERN-EP-2017-265
52. “Search for the standard model Higgs boson produced in association with top quarks and decaying into a $b\bar{b}$ pair in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1712.08895 [hep-ex]
DOI:10.1103/PhysRevD.97.072016
Phys. Rev. D **97**, no. 7, 072016 (2018)
CERN-EP-2017-291
53. “Evidence for the associated production of the Higgs boson and a top quark pair with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1712.08891 [hep-ex]
DOI:10.1103/PhysRevD.97.072003
Phys. Rev. D **97**, no. 7, 072003 (2018)
CERN-EP-2017-281
54. “Search for electroweak production of supersymmetric states in scenarios with compressed mass spectra at $\sqrt{s} = 13$ TeV with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1712.08119 [hep-ex]
DOI:10.1103/PhysRevD.97.052010
Phys. Rev. D **97**, no. 5, 052010 (2018)
CERN-EP-2017-297
55. “Measurement of the production cross section of three isolated photons in pp collisions at $\sqrt{s} = 8$ TeV using the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1712.07291 [hep-ex]
DOI:10.1016/j.physletb.2018.03.057
Phys. Lett. B **781**, 55 (2018)
CERN-EP-2017-302
56. “Measurement of the inclusive and fiducial $t\bar{t}$ production cross-sections in the lepton+jets channel in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1712.06857 [hep-ex]
DOI:10.1140/epjc/s10052-018-5904-z

57. “Search for heavy resonances decaying into a W or Z boson and a Higgs boson in final states with leptons and b -jets in 36 fb^{-1} of $\sqrt{s} = 13 \text{ TeV}$ pp collisions with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1712.06518 [hep-ex]
DOI:10.1007/JHEP03(2018)174
JHEP **1803**, 174 (2018)
CERN-EP-2017-250
58. “Search for heavy ZZ resonances in the $\ell^+\ell^-\ell^+\ell^-$ and $\ell^+\ell^-\nu\bar{\nu}$ final states using proton-proton collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1712.06386 [hep-ex]
DOI:10.1140/epjc/s10052-018-5686-3
Eur. Phys. J. C **78**, no. 4, 293 (2018)
CERN-EP-2017-251
59. “Search for exclusive Higgs and Z boson decays to $\phi\gamma$ and $\rho\gamma$ with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1712.02758 [hep-ex]
DOI:10.1007/JHEP07(2018)127
JHEP **1807**, 127 (2018)
CERN-EP-2017-273
60. “Search for squarks and gluinos in final states with jets and missing transverse momentum using 36 fb^{-1} of $\sqrt{s} = 13 \text{ TeV}$ pp collision data with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1712.02332 [hep-ex]
DOI:10.1103/PhysRevD.97.112001
Phys. Rev. D **97**, no. 11, 112001 (2018)
CERN-EP-2017-136
61. “Measurement of the Higgs boson coupling properties in the $H \rightarrow ZZ^* \rightarrow 4\ell$ decay channel at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1712.02304 [hep-ex]
DOI:10.1007/JHEP03(2018)095
JHEP **1803**, 095 (2018)
CERN-EP-2017-206
62. “Search for long-lived charginos based on a disappearing-track signature in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1712.02118 [hep-ex]
DOI:10.1007/JHEP06(2018)022
JHEP **1806**, 022 (2018)
CERN-EP-2017-179
63. “Measurement of differential cross-sections of a single top quark produced in association with a W boson at $\sqrt{s} = 13 \text{ TeV}$ with ATLAS”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1712.01602 [hep-ex]
DOI:10.1140/epjc/s10052-018-5649-8
Eur. Phys. J. C **78**, no. 3, 186 (2018)
CERN-EP-2017-221

64. “Search for top-squark pair production in final states with one lepton, jets, and missing transverse momentum using 36 fb¹ of $\sqrt{s} = 13$ TeV pp collision data with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1711.11520 [hep-ex]
DOI:10.1007/JHEP06(2018)108
JHEP **1806**, 108 (2018)
CERN-EP-2017-246
65. “Measurement of the Soft-Drop Jet Mass in pp Collisions at $\sqrt{s} = 13$ TeV with the ATLAS Detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1711.08341 [hep-ex]
DOI:10.1103/PhysRevLett.121.092001
Phys. Rev. Lett. **121**, no. 9, 092001 (2018)
CERN-EP-2017-231
66. “Search for dark matter and other new phenomena in events with an energetic jet and large missing transverse momentum using the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1711.03301 [hep-ex]
DOI:10.1007/JHEP01(2018)126
JHEP **1801**, 126 (2018)
CERN-EP-2017-230
67. “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”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1711.03296 [hep-ex]
DOI:10.1007/JHEP05(2018)077
JHEP **1805**, 077 (2018)
CERN-EP-2017-213
68. “Measurement of inclusive jet and dijet cross-sections in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1711.02692 [hep-ex]
DOI:10.1007/JHEP05(2018)195
JHEP **1805**, 195 (2018)
CERN-EP-2017-157
69. “Search for supersymmetry in final states with missing transverse momentum and multiple b -jets in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1711.01901 [hep-ex]
DOI:10.1007/JHEP06(2018)107
JHEP **1806**, 107 (2018)
CERN-EP-2017-182
70. “Search for dark matter produced in association with bottom or top quarks in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1710.11412 [hep-ex]
DOI:10.1140/epjc/s10052-017-5486-1
Eur. Phys. J. C **78**, no. 1, 18 (2018)
CERN-EP-2017-229
71. “Search for doubly charged Higgs boson production in multi-lepton final states with the ATLAS detector using proton-proton collisions at $\sqrt{s} = 13$ TeV”
M. Aaboud *et al.* [ATLAS Collaboration].

- arXiv:1710.09748 [hep-ex]
 DOI:10.1140/EPJC/S10052-018-5661-Z, 10.1140/epjc/s10052-018-5661-z
Eur. Phys. J. C **78**, no. 3, 199 (2018)
 CERN-EP-2017-198
72. “**Measurement of differential cross sections of isolated-photon plus heavy-flavour jet production in pp collisions at $\sqrt{s} = 8$ TeV using the ATLAS detector**”
 M. Aaboud *et al.* [ATLAS Collaboration].
 arXiv:1710.09560 [hep-ex]
 DOI:10.1016/j.physletb.2017.11.054
Phys. Lett. B **776**, 295 (2018)
 CERN-EP-2017-217
73. “**Search for WW/WZ resonance production in $\ell\nu qq$ final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector**”
 M. Aaboud *et al.* [ATLAS Collaboration].
 arXiv:1710.07235 [hep-ex]
 DOI:10.1007/JHEP03(2018)042
JHEP **1803**, 042 (2018)
 CERN-EP-2017-223
74. “**A search for pair-produced resonances in four-jet final states at $\sqrt{s} = 13$ TeV with the ATLAS detector**”
 M. Aaboud *et al.* [ATLAS Collaboration].
 arXiv:1710.07171 [hep-ex]
 DOI:10.1140/epjc/s10052-018-5693-4
Eur. Phys. J. C **78**, no. 3, 250 (2018)
 CERN-EP-2017-183
75. “**Search for B-L R -parity-violating top squarks in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS experiment**”
 M. Aaboud *et al.* [ATLAS Collaboration].
 arXiv:1710.05544 [hep-ex]
 DOI:10.1103/PhysRevD.97.032003
Phys. Rev. D **97**, no. 3, 032003 (2018)
 CERN-EP-2017-171
76. “**Search for long-lived, massive particles in events with displaced vertices and missing transverse momentum in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector**”
 M. Aaboud *et al.* [ATLAS Collaboration].
 arXiv:1710.04901 [hep-ex]
 DOI:10.1103/PhysRevD.97.052012
Phys. Rev. D **97**, no. 5, 052012 (2018)
 CERN-EP-2017-202
77. “**Measurement of the production cross-section of a single top quark in association with a Z boson in protonproton collisions at 13 TeV with the ATLAS detector**”
 M. Aaboud *et al.* [ATLAS Collaboration].
 arXiv:1710.03659 [hep-ex]
 DOI:10.1016/j.physletb.2018.03.023
Phys. Lett. B **780**, 557 (2018)
 CERN-EP-2017-188
78. “**Search for heavy resonances decaying into WW in the $e\nu\mu\nu$ final state in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector**”
 M. Aaboud *et al.* [ATLAS Collaboration].
 arXiv:1710.01123 [hep-ex]
 DOI:10.1140/epjc/s10052-017-5491-4
Eur. Phys. J. C **78**, no. 1, 24 (2018)
 CERN-EP-2017-214

79. “Search for new phenomena in high-mass final states with a photon and a jet from pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1709.10440 [hep-ex]
DOI:10.1140/epjc/s10052-018-5553-2
Eur. Phys. J. C **78**, no. 2, 102 (2018)
CERN-EP-2017-148
80. “ $ZZ \rightarrow \ell^+ \ell^- \ell'^+ \ell'^-$ cross-section measurements and search for anomalous triple gauge couplings in 13 TeV pp collisions with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1709.07703 [hep-ex]
DOI:10.1103/PhysRevD.97.032005
Phys. Rev. D **97**, no. 3, 032005 (2018)
CERN-EP-2017-163
81. “Search for additional heavy neutral Higgs and gauge bosons in the ditau final state produced in 36 fb^{-1} of pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1709.07242 [hep-ex]
DOI:10.1007/JHEP01(2018)055
JHEP **1801**, 055 (2018)
CERN-EP-2017-199
82. “A search for resonances decaying into a Higgs boson and a new particle X in the $XH \rightarrow qgbb$ final state with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1709.06783 [hep-ex]
DOI:10.1016/j.physletb.2018.01.042
Phys. Lett. B **779**, 24 (2018)
CERN-EP-2017-204
83. “Combination of inclusive and differential $t\bar{t}$ charge asymmetry measurements using ATLAS and CMS data at $\sqrt{s} = 7$ and 8 TeV”
M. Aaboud *et al.* [ATLAS and CMS Collaborations].
arXiv:1709.05327 [hep-ex]
DOI:10.1007/JHEP04(2018)033
JHEP **1804**, 033 (2018)
CMS-TOP-15-016, ATLAS-TOPQ-2016-16, CERN-EP-2017-236
84. “Direct top-quark decay width measurement in the $t\bar{t}$ lepton+jets channel at $\sqrt{s}=8$ TeV with the ATLAS experiment”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1709.04207 [hep-ex]
DOI:10.1140/epjc/s10052-018-5595-5
Eur. Phys. J. C **78**, no. 2, 129 (2018)
CERN-EP-2017-187
85. “Measurement of τ polarisation in $Z/\gamma^* \rightarrow \tau\tau$ decays in protonproton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1709.03490 [hep-ex]
DOI:10.1140/epjc/s10052-018-5619-1
Eur. Phys. J. C **78**, no. 2, 163 (2018)
CERN-EP-2017-172
86. “Measurement of quarkonium production in protonlead and protonproton collisions at 5.02 TeV with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1709.03089 [nucl-ex]

DOI:10.1140/epjc/s10052-018-5624-4
Eur. Phys. J. C **78**, no. 3, 171 (2018)
CERN-EP-2017-197, CERN-PH-EP-2017-197

87. “**Measurement of longitudinal flow decorrelations in Pb+Pb collisions at $\sqrt{s_{\text{NN}}} = 2.76$ and 5.02 TeV with the ATLAS detector**”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1709.02301 [nucl-ex]
DOI:10.1140/epjc/s10052-018-5605-7
Eur. Phys. J. C **78**, no. 2, 142 (2018)
CERN-EP-2017-191
88. “**Searches for heavy ZZ and ZW resonances in the $\ell\ell qq$ and $\nu\nu qq$ final states in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector**”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1708.09638 [hep-ex]
DOI:10.1007/JHEP03(2018)009
JHEP **1803**, 009 (2018)
CERN-EP-2017-146
89. “**Search for an invisibly decaying Higgs boson or dark matter candidates produced in association with a Z boson in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector**”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1708.09624 [hep-ex]
DOI:10.1016/j.physletb.2017.11.049
Phys. Lett. B **776**, 318 (2018)
CERN-EP-2017-166
90. “**Search for the direct production of charginos and neutralinos in final states with tau leptons in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector**”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1708.07875 [hep-ex]
DOI:10.1140/epjc/s10052-018-5583-9
Eur. Phys. J. C **78**, no. 2, 154 (2018)
CERN-EP-2017-173
91. “**Search for diboson resonances with boson-tagged jets in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector**”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1708.04445 [hep-ex]
DOI:10.1016/j.physletb.2017.12.011
Phys. Lett. B **777**, 91 (2018)
CERN-EP-2017-147
92. “**Measurement of the exclusive $\gamma\gamma \rightarrow \mu^+\mu^-$ process in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector**”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1708.04053 [hep-ex]
DOI:10.1016/j.physletb.2017.12.043
Phys. Lett. B **777**, 303 (2018)
CERN-EP-2017-151
93. “**Measurement of long-range multiparticle azimuthal correlations with the subevent cumulant method in pp and p + Pb collisions with the ATLAS detector at the CERN Large Hadron Collider**”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1708.03559 [hep-ex]
DOI:10.1103/PhysRevC.97.024904
Phys. Rev. C **97**, no. 2, 024904 (2018)
CERN-EP-2017-160

94. “Search for a new heavy gauge boson resonance decaying into a lepton and missing transverse momentum in 36 fb^{-1} of pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with the ATLAS experiment”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1706.04786 [hep-ex]
DOI:10.1140/epjc/s10052-018-5877-y
Eur. Phys. J. C **78**, no. 5, 401 (2018)
CERN-EP-2017-082
95. “Measurement of jet fragmentation in 5.02 TeV proton-lead and proton-proton collisions with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1706.02859 [hep-ex]
DOI:10.1016/j.nuclphysa.2018.07.006
Nucl. Phys. A **978**, 65 (2018)
CERN-EP-2017-065
96. “Measurement of the W -boson mass in pp collisions at $\sqrt{s} = 7 \text{ TeV}$ with the ATLAS detector”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1701.07240 [hep-ex]
DOI:10.1140/epjc/s10052-017-5475-4
Eur. Phys. J. C **78**, no. 2, 110 (2018)
CERN-EP-2016-305
97. “Measurement of the cross-section for producing a W boson in association with a single top quark in pp collisions at $\sqrt{s} = 13 \text{ TeV}$ with ATLAS”
M. Aaboud *et al.* [ATLAS Collaboration].
arXiv:1612.07231 [hep-ex]
DOI:10.1007/JHEP01(2018)063
JHEP **1801**, 063 (2018)
CERN-EP-2016-238