

Assoc. Prof. HİLAL KÜÇÜK

Personal Information

Office Phone: [+90 312 202 1325](tel:+903122021325)

Email: hilalkucuk@gazi.edu.tr

Web: <https://avesis.gazi.edu.tr/hilalkucuk>

International Researcher IDs

ScholarID: RgI-I-MAAAAJ

ORCID: 0000-0002-0777-1102

Publons / Web Of Science ResearcherID: AAM-5530-2020

ScopusID: 57219238343

Yoksis Researcher ID: 257895

Education Information

Doctorate, University of London-University College London, United Kingdom 2010 - 2016

Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), Turkey 2004 - 2007

Undergraduate, Gazi University, Fen Fakültesi, Fizik Bölümü, Turkey 2000 - 2004

Dissertations

Doctorate, Measurement of the inclusive-jet cross-section in proton-proton collisions and study of Quark-Gluon Jet discrimination with the ATLAS experiment at the LHC, University of London-University College London, 2016

Postgraduate, Bazı metal 2,2'-xx-dipyridyl'xxin halojen birleşiklerinin infrared spektroskopisi ile incelenmesi, Gazi University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), 2007

Research Areas

Physics, High Energy Physics, Gases, Plasmas and Electrical Discharges Physics, Basic Particles and Areas, Condensed Matter 1: Structural, Mechanical and Thermal Properties, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties, Natural Sciences

Academic Titles / Tasks

Associate Professor, Gazi University, Fen Fakültesi, Fizik, 2023 - Continues

Assistant Professor, Gazi University, Fen Fakültesi, Fizik, 2022 - 2023

Research Assistant, Gazi University, Fen Fakültesi, Fizik, 2016 - 2022

Academic and Administrative Experience

Erasmus Coordinator, Gazi University, Fen Fakültesi, Fizik, 2019 - Continues

Courses

Fizik I, Undergraduate, 2023 - 2024
ETHIC OF SCIENCE, Undergraduate, 2023 - 2024
Parçacık Fiziği, Undergraduate, 2022 - 2023
PHYSICS LAB., Undergraduate, 2019 - 2020
FİZİK II, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Structural, mechanical, electronic and thermodynamic properties of VH₂ for hydrogen storage purposes**
KÜÇÜK H., Al S.
Physica B: Condensed Matter, vol.680, 2024 (SCI-Expanded)
- II. **The effect of the chemical bonding environment changes in FeNX: Hydrocarbon adsorption by DFT**
KÜÇÜK H., GENÇ A. E.
Inorganic Chemistry Communications, vol.162, 2024 (SCI-Expanded)
- III. **Activation of NO₂ by Modifying the Porphyrin Unit with Oxygen in a MnN₄ Graphene Layer**
Emre Genç A., KÜÇÜK H., Akça A.
ChemistrySelect, vol.8, no.12, 2023 (SCI-Expanded)
- IV. **The small gas activities on different number of nitrogen atom doping to cobalt embedded graphene**
KÜÇÜK H.
COMPUTATIONAL AND THEORETICAL CHEMISTRY, vol.1213, 2022 (SCI-Expanded)
- V. **Hydrogen generation from hydrazine on N₄ moieties graphene embedded by vanadium metal, DFT calculation**
KÜÇÜK H., Akca A.
COMPUTATIONAL AND THEORETICAL CHEMISTRY, vol.1208, 2022 (SCI-Expanded)
- VI. **Theoretical Insights into the NH₃ Decomposition Mechanism on the Cu- and Pt- Embedded Graphene Surfaces: A DFT Approach**
AKÇA A., KÜÇÜK H., KARAMAN O., KARAMAN C., ATAR N., Yola M. L.
ECS JOURNAL OF SOLID STATE SCIENCE AND TECHNOLOGY, vol.10, no.10, 2021 (SCI-Expanded)
- VII. **Search for light resonances decaying to boosted quark pairs and produced in association with a photon or a jet in proton-proton collisions at root s=13 TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., Abouzeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
PHYSICS LETTERS B, vol.788, pp.316-335, 2019 (SCI-Expanded)
- VIII. **Measurement of dijet azimuthal decorrelations in pp collisions at root s=8 TeV with the ATLAS detector and determination of the strong coupling**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
PHYSICAL REVIEW D, vol.98, no.9, 2018 (SCI-Expanded)
- IX. **Performance of missing transverse momentum reconstruction with the ATLAS detector using proton-proton collisions at $\sqrt{s}=13\text{TeV}$**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S., AbouZeid O., Abraham N., Abramowicz H., Abreu H., et al.
European Physical Journal C, vol.78, no.11, 2018 (SCI-Expanded)
- X. **Measurements of differential cross sections of top quark pair production in association with jets in pp collisions at root s=13 TeV using the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2018 (SCI-Expanded)
- XI. **Angular analysis of B-d(0) -> K* mu(+)-mu(-) decays in pp collisions at root s=8 TeV with the**

ATLAS detector

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2018 (SCI-Expanded)

XII. Measurement of jet fragmentation in 5.02 TeV proton-lead and proton-proton collisions with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

NUCLEAR PHYSICS A, vol.978, pp.65-106, 2018 (SCI-Expanded)

XIII. Measurements of Higgs boson properties in the diphoton decay channel with 36 fb⁻¹ of pp collision data at root s=13 TeV with the ATLAS detector

Aaboud M., Collaboration A. T. L. A. S., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

PHYSICAL REVIEW D, vol.98, no.5, 2018 (SCI-Expanded)

XIV. Measurement of the Soft-Drop Jet Mass in pp Collisions at root s=13 TeV with the ATLAS Detector

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

PHYSICAL REVIEW LETTERS, vol.121, no.9, 2018 (SCI-Expanded)

XV. Search for supersymmetry in events with four or more leptons in root s=13 TeV pp collisions with ATLAS

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

PHYSICAL REVIEW D, vol.98, no.3, 2018 (SCI-Expanded)

XVI. Search for exclusive Higgs and Z boson decays to phi gamma and rho gamma with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.7, 2018 (SCI-Expanded)

XVII. Measurements of t(t)over-bar differential cross-sections of highly boosted top quarks decaying to all-hadronic final states in pp collisions at root s=13 TeV using the ATLAS detector

Aaboud M., Collaboration A. T. L. A. S., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

PHYSICAL REVIEW D, vol.98, no.1, 2018 (SCI-Expanded)

XVIII. Search for flavour-changing neutral current top-quark decays t -> qZ in proton-proton collisions at root s=13 TeV with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.7, 2018 (SCI-Expanded)

XIX. Search for supersymmetry in final states with missing transverse momentum and multiple b-jets in proton-proton collisions at root s=13 TeV with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.6, 2018 (SCI-Expanded)

XX. Search for long-lived charginos based on a disappearing-track signature in pp collisions at root s=13 TeV with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.6, 2018 (SCI-Expanded)

XXI. Search for top-squark pair production in final states with one lepton, jets, and missing transverse momentum using 36 fb⁻¹ of root s=13 TeV pp collision data with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H.,

- Abreu H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.6, 2018 (SCI-Expanded)
- XXII. **Search for squarks and gluinos in final states with jets and missing transverse momentum using 36 fb(-1) of root s=13 TeV pp collision data with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
PHYSICAL REVIEW D, vol.97, no.11, 2018 (SCI-Expanded)
- XXIII. **Search for Higgs boson decays to beyond-the-Standard-Model light bosons in four-lepton events with the ATLAS detector at root s=13 TeV**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.6, 2018 (SCI-Expanded)
- XXIV. **Measurement of the inclusive and fiducial $t\bar{t}$ production cross-sections in the lepton+jets channel in pp collisions at $\sqrt{s}=8\text{TeV}$ with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S., AbouZeid O., Abraham N., Abramowicz H., Abreu H., et al.
European Physical Journal C, vol.78, no.6, 2018 (SCI-Expanded)
- XXV. **Measurement of the production cross-section of a single top quark in association with a Z boson in proton-proton collisions at 13 TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
PHYSICS LETTERS B, vol.780, pp.557-577, 2018 (SCI-Expanded)
- XXVI. **Search for a new heavy gauge-boson resonance decaying into a lepton and missing transverse momentum in 36 fb - 1 of pp collisions at $\sqrt{s}=13$ TeV with the ATLAS experiment**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S., AbouZeid O., Abraham N., Abramowicz H., Abreu H., et al.
European Physical Journal C, vol.78, no.5, 2018 (SCI-Expanded)
- XXVII. **Measurement of differential cross sections and W^+/W^- cross-section ratios for W boson production in association with jets at root s=8 TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.5, 2018 (SCI-Expanded)
- XXVIII. **Measurement of the cross section for isolated-photon plus jet production in pp collisions at root s=13 TeV using the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
PHYSICS LETTERS B, vol.780, pp.578-602, 2018 (SCI-Expanded)
- XXIX. **Measurement of inclusive jet and dijet cross-sections in proton-proton collisions at root s=13 TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.5, 2018 (SCI-Expanded)
- XXX. **Search for a Structure in the B-s(0) pi(+/-) Invariant Mass Spectrum with the ATLAS Experiment**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., Abouzeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
PHYSICAL REVIEW LETTERS, vol.120, no.20, 2018 (SCI-Expanded)
- XXXI. **Search for heavy ZZ resonances in the $\ell+\ell-\ell+\ell-$ and $\ell+\ell-\nu\nu$ - final states using proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S., AbouZeid O., Abraham N., Abramowicz H., Abreu H., et al.
European Physical Journal C, vol.78, no.4, 2018 (SCI-Expanded)

- XXXII. **A search for resonances decaying into a Higgs boson and a new particle X in the $XH \rightarrow qqbb$ final state with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
PHYSICS LETTERS B, vol.779, pp.24-45, 2018 (SCI-Expanded)
- XXXIII. **Measurement of the Higgs boson coupling properties in the $H \rightarrow ZZ^* \rightarrow 4l$ decay channel at root $s=13$ TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.3, 2018 (SCI-Expanded)
- XXXIV. **Measurement of quarkonium production in proton-lead and proton-proton collisions at 5.02 TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S., AbouZeid O., Abraham N., Abramowicz H., et al.
European Physical Journal C, vol.78, no.3, 2018 (SCI-Expanded)
- XXXV. **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 root $s=13$ TeV pp collisions with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.3, 2018 (SCI-Expanded)
- XXXVI. **Search for long-lived, massive particles in events with displaced vertices and missing transverse momentum in root $S=13$ TeV pp collisions with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
PHYSICAL REVIEW D, vol.97, no.5, 2018 (SCI-Expanded)
- XXXVII. **Measurement of differential cross-sections of a single top quark produced in association with a W boson at $\sqrt{s}=13$ TeV with ATLAS**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S., AbouZeid O., Abraham N., Abramowicz H., Abreu H., et al.
European Physical Journal C, vol.78, no.3, 2018 (SCI-Expanded)
- XXXVIII. **A search for pair-produced resonances in four-jet final states at $\sqrt{s}=13$ TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S., AbouZeid O., Abraham N., Abramowicz H., Abreu H., et al.
European Physical Journal C, vol.78, no.3, 2018 (SCI-Expanded)
- XXXIX. **Search for WW/WZ resonance production in $lvqq$ final states in pp collisions at root $s=13$ TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2018 (SCI-Expanded)
- XL. **Searches for heavy ZZ and ZW resonances in the $llqq$ and $vvqq$ final states in pp collisions at root $s=13$ TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.3, 2018 (SCI-Expanded)
- XLI. **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**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S., AbouZeid O., Abraham N., Abramowicz H., Abreu H., et al.
European Physical Journal C, vol.78, no.3, 2018 (SCI-Expanded)
- XLII. **Search for B - L R-parity-violating top squarks in root $s=13$ TeV pp collisions with the ATLAS experiment**

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

PHYSICAL REVIEW D, vol.97, no.3, 2018 (SCI-Expanded)

XLIII. Search for the direct production of charginos and neutralinos in final states with tau leptons in $\sqrt{s}=13\text{TeV}$ pp collisions with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S., AbouZeid O., Abraham N., Abramowicz H., Abreu H., et al.

European Physical Journal C, vol.78, no.2, 2018 (SCI-Expanded)

XLIV. Measurement of the exclusive $\gamma\gamma \rightarrow \mu^{(+)}\mu^{(-)}$ process in proton-proton collisions at root $s=13$ TeV with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

PHYSICS LETTERS B, vol.777, pp.303-323, 2018 (SCI-Expanded)

XLV. 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

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S., AbouZeid O., Abraham N., Abramowicz H., Abreu H., et al.

European Physical Journal C, vol.78, no.2, 2018 (SCI-Expanded)

XLVI. Measurement of the W-boson mass in pp collisions at $\sqrt{s}=7\text{TeV}$ with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S., AbouZeid O., Abraham N., Abramowicz H., et al.

European Physical Journal C, vol.78, no.2, 2018 (SCI-Expanded)

XLVII. Measurement of longitudinal flow decorrelations in Pb+Pb collisions at $\sqrt{s_{NN}}=2.76$ and 5.02 TeV with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S., AbouZeid O., Abraham N., Abramowicz H., Abreu H., et al.

European Physical Journal C, vol.78, no.2, 2018 (SCI-Expanded)

XLVIII. Measurement of τ polarisation in $Z/\gamma^* \rightarrow \tau\tau$ decays in proton-proton collisions at $\sqrt{s}=8$ TeV with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S., AbouZeid O., Abraham N., Abramowicz H., Abreu H., et al.

European Physical Journal C, vol.78, no.2, 2018 (SCI-Expanded)

XLIX. Direct top-quark decay width measurement in the $t\bar{t}$ lepton+jets channel at $\sqrt{s}=8\text{TeV}$ with the ATLAS experiment

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S., AbouZeid O., Abraham N., Abramowicz H., Abreu H., et al.

European Physical Journal C, vol.78, no.2, 2018 (SCI-Expanded)

L. Measurement of long-range multiparticle azimuthal correlations with the subevent cumulant method in pp and p plus Pb collisions with the ATLAS detector at the CERN Large Hadron Collider

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

PHYSICAL REVIEW C, vol.97, no.2, 2018 (SCI-Expanded)

LI. Search for diboson resonances with boson-tagged jets in pp collisions at root $S=13$ TeV with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

PHYSICS LETTERS B, vol.777, pp.91-113, 2018 (SCI-Expanded)

LII. $ZZ \rightarrow l^{(+)}l^{(-)}l'^{(+)}l''^{(-)}$ cross-section measurements and search for anomalous triple gauge couplings in 13 TeV pp collisions with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

PHYSICAL REVIEW D, vol.97, no.3, 2018 (SCI-Expanded)

LIII. **Search for dark matter produced in association with bottom or top quarks in $\sqrt{s}=13$ TeV pp collisions with the ATLAS detector**

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S., AbouZeid O., Abraham N., Abramowicz H., Abreu H., et al.

European Physical Journal C, vol.78, no.1, 2018 (SCI-Expanded)

LIV. **Measurement of differential cross sections of isolated-photon plus heavy-flavour jet production in pp collisions at root s=8 TeV using the ATLAS detector**

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

PHYSICS LETTERS B, vol.776, pp.295-317, 2018 (SCI-Expanded)

LV. **Search for an invisibly decaying Higgs boson or dark matter candidates produced in association with a Z boson in pp collisions at root s=13 TeV with the ATLAS detector**

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

PHYSICS LETTERS B, vol.776, pp.318-337, 2018 (SCI-Expanded)

LVI. **Search for electroweak production of supersymmetric particles in final states with two or three leptons at $\sqrt{s} = 13$ TeV with the ATLAS detector**

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S., Abouzeid O., Abraham N., Abramowicz H., Abreu H., et al.

European Physical Journal C, vol.78, no.12, 2018 (SCI-Expanded)

LVII. **Search for additional heavy neutral Higgs and gauge bosons in the ditau final state produced in 36 fb(-1) of pp collisions at root s=13 TeV with the ATLAS detector**

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.1, 2018 (SCI-Expanded)

LVIII. **Search for dark matter and other new phenomena in events with an energetic jet and large missing transverse momentum using the ATLAS detector**

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.1, 2018 (SCI-Expanded)

LIX. **Measurement of the cross-section for producing a W boson in association with a single top quark in pp collisions at root s=13 TeV with ATLAS**

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2018, no.1, 2018 (SCI-Expanded)

LX. **Search for heavy resonances decaying into WW in the e nu mu nu final state in pp collisions at root s=13 TeV with the ATLAS detector**

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.78, no.1, 2018 (SCI-Expanded)

LXI. **Study of the material of the ATLAS inner detector for Run 2 of the LHC**

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

JOURNAL OF INSTRUMENTATION, vol.12, 2017 (SCI-Expanded)

LXII. **Measurement of the cross-section for electroweak production of dijets in association with a Z boson in pp collisions at root s=13 TeV with the ATLAS detector**

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

PHYSICS LETTERS B, vol.775, pp.206-228, 2017 (SCI-Expanded)

LXIII. **Determination of the strong coupling constant α_s from transverse energy-energy correlations in**

multijet events at $\sqrt{s}=8\text{TeV}$ using the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S., AbouZeid O., Abraham N., Abramowicz H., et al.

European Physical Journal C, vol.77, no.12, 2017 (SCI-Expanded)

LXIV. Measurement of the Drell-Yan triple-differential cross section in pp collisions at root s=8 TeV

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2017, no.12, 2017 (SCI-Expanded)

LXV. Search for a scalar partner of the top quark in the jets plus missing transverse momentum final state at root s=13 TeV with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

JOURNAL OF HIGH ENERGY PHYSICS, no.12, 2017 (SCI-Expanded)

LXVI. Evidence for the $H \rightarrow b\bar{b}$ decay with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

JOURNAL OF HIGH ENERGY PHYSICS, no.12, 2017 (SCI-Expanded)

LXVII. Search for new phenomena in high-mass diphoton final states using 37 fb⁻¹ of proton-proton collisions collected at root s=13 TeV with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

PHYSICS LETTERS B, vol.775, pp.105-125, 2017 (SCI-Expanded)

LXVIII. Search for new phenomena with large jet multiplicities and missing transverse momentum using large-radius jets and flavour-tagging at ATLAS in 13 TeV pp collisions

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

JOURNAL OF HIGH ENERGY PHYSICS, no.12, 2017 (SCI-Expanded)

LXIX. Search for direct top squark pair production in final states with two leptons in $\sqrt{s}=13\text{ TeV}$ pp collisions with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S., AbouZeid O., Abraham N., Abramowicz H., Abreu H., et al.

European Physical Journal C, vol.77, no.12, 2017 (SCI-Expanded)

LXX. Femtoscopy with identified charged pions in proton-lead collisions at root s(NN)=5.02 TeV with ATLAS

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

PHYSICAL REVIEW C, vol.96, no.6, 2017 (SCI-Expanded)

LXXI. Search for squarks and gluinos in events with an isolated lepton, jets, and missing transverse momentum at root s=13 TeV with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

PHYSICAL REVIEW D, vol.96, no.11, 2017 (SCI-Expanded)

LXXII. Search for dark matter in association with a Higgs boson decaying to two photons at root s=13 TeV with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

PHYSICAL REVIEW D, vol.96, no.11, 2017 (SCI-Expanded)

LXXIII. Analysis of the Wtb vertex from the measurement of triple-differential angular decay rates of single top quarks produced in the t-channel at root s=8 TeV with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

- JOURNAL OF HIGH ENERGY PHYSICS, no.12, 2017 (SCI-Expanded)
- LXXIV. **Measurement of jet $p(T)$ correlations in Pb+Pb and pp collisions at $\sqrt{s(NN)}=2.76$ TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
PHYSICS LETTERS B, vol.774, pp.379-402, 2017 (SCI-Expanded)
- LXXV. **Measurement of the $t(\bar{t})$ over-bar gamma production cross section in proton-proton collisions at $\sqrt{s}=8$ TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.11, 2017 (SCI-Expanded)
- LXXVI. **Search for Heavy Higgs Bosons A/H Decaying to a Top Quark Pair in pp Collisions at $\sqrt{s}=8$ TeV with the ATLAS Detector**
Aaboud M., Aad C., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
PHYSICAL REVIEW LETTERS, vol.119, no.19, 2017 (SCI-Expanded)
- LXXVII. **Measurement of detector-corrected observables sensitive to the anomalous production of events with jets and large missing transverse momentum in pp collisions at $\sqrt{s}=13$ TeV using the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S., AbouZeid O., Abraham N., Abramowicz H., et al.
European Physical Journal C, vol.77, no.11, 2017 (SCI-Expanded)
- LXXVIII. **Search for Dark Matter Produced in Association with a Higgs Boson Decaying to $b(\bar{b})$ Using 36 fb^{-1} of pp Collisions at $\sqrt{s}=13$ TeV with the ATLAS Detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
PHYSICAL REVIEW LETTERS, vol.119, no.18, 2017 (SCI-Expanded)
- LXXIX. **Search for heavy resonances decaying to a W or Z boson and a Higgs boson in the $q(\bar{q})b(\bar{b})$ final state in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
PHYSICS LETTERS B, vol.774, pp.494-515, 2017 (SCI-Expanded)
- LXXX. **Measurement of b-hadron pair production with the ATLAS detector in proton-proton collisions at $\sqrt{s}=8$ TeV**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.11, 2017 (SCI-Expanded)
- LXXXI. **Measurement of lepton differential distributions and the top quark mass in $t(\bar{t})$ production in pp collisions at a $\sqrt{s}=8$ TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.11, 2017 (SCI-Expanded)
- LXXXII. **Study of ordered hadron chains with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
PHYSICAL REVIEW D, vol.96, no.9, 2017 (SCI-Expanded)
- LXXXIII. **Measurements of top-quark pair differential cross-sections in the lepton plus jets channel in pp collisions at $\sqrt{s}=13$ TeV using the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.11, 2017 (SCI-Expanded)

- LXXXIV. **Search for supersymmetry in events with b-tagged jets and missing transverse momentum in pp collisions at root s=13 TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.11, 2017 (SCI-Expanded)
- LXXXV. **Measurement of inclusive and differential cross sections in the $H \rightarrow ZZ^* \rightarrow 4l$ decay channel in pp collisions at root s=13 TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2017 (SCI-Expanded)
- LXXXVI. **Measurement of the $W^+ W^-$ production cross section in pp collisions at a centre-of-mass energy of root s=13 TeV with the ATLAS experiment**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
PHYSICS LETTERS B, vol.773, pp.354-374, 2017 (SCI-Expanded)
- LXXXVII. **Search for new high-mass phenomena in the dilepton final state using 36 fb⁻¹ of proton-proton collision data at root s=13 TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2017 (SCI-Expanded)
- LXXXVIII. **Jet energy scale measurements and their systematic uncertainties in proton-proton collisions at root s=13 TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
PHYSICAL REVIEW D, vol.96, no.7, 2017 (SCI-Expanded)
- LXXXIX. **Search for pair production of heavy vector-like quarks decaying to high-p(T) W bosons and b quarks in the lepton-plus-jets final state in pp collisions at root s=13 TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2017 (SCI-Expanded)
- XC. **Search for top quark decays $t \rightarrow qH$, with $H \rightarrow \gamma\gamma$, in root s=13 TeV pp collisions using the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.10, 2017 (SCI-Expanded)
- XCI. **Performance of the ATLAS track reconstruction algorithms in dense environments in LHC Run 2**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.10, 2017 (SCI-Expanded)
- XCII. **Searches for the Z gamma decay mode of the Higgs boson and for new high-mass resonances in pp collisions at root s=13 TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2017, no.10, 2017 (SCI-Expanded)
- XCIII. **Search for new phenomena in a lepton plus high jet multiplicity final state the ATLAS experiment using root S=13 TeV proton-proton collision data**
Aaboud M., Collaboration A. T. L. A. S., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2017, no.9, 2017 (SCI-Expanded)
- XCIV. **Identification and rejection of pile-up jets at high pseudorapidity with the ATLAS detector**
Aaboud M. y., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L.,

- Abramowicz H., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.9, 2017 (SCI-Expanded)
- XCV. **Search for new phenomena in dijet events using 37 fb(-1) of pp collision data collected at root s=13 TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
PHYSICAL REVIEW D, vol.96, no.5, 2017 (SCI-Expanded)
- XCVI. **Measurement of the inclusive jet cross-sections in proton-proton collisions at root s=8 TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2017, no.9, 2017 (SCI-Expanded)
- XCVII. **Search for supersymmetry in final states with two same-sign or three leptons and jets using 36 fb(-1) of root s=13 TeV pp collision data with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2017, no.9, 2017 (SCI-Expanded)
- XCVIII. **Study of WWγ and WZγ production in pp collisions at √s=8TeV and search for anomalous quartic gauge couplings with the ATLAS experiment**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S., AbouZeid O., Abraham N., Abramowicz H., Abreu H., et al.
European Physical Journal C, vol.77, no.9, 2017 (SCI-Expanded)
- XCIX. **Evidence for light-by-light scattering in heavy-ion collisions with the ATLAS detector at the LHC**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
NATURE PHYSICS, vol.13, no.9, pp.852-867, 2017 (SCI-Expanded)
- C. **Top-quark mass measurement in the all-hadronic t(t)over-bar decay channel at root s=8 TeV with the ATLAS detector**
Aaboud M. D., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2017, no.9, 2017 (SCI-Expanded)
- CI. **Search for direct top squark pair production in events with a Higgs or Z boson, and missing transverse momentum in root s=13 TeV pp collisions with the ATLAS detector**
Aaboud M., collaboration A. T. L. A. S., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2017, no.8, 2017 (SCI-Expanded)
- CII. **Search for pair production of vector-like top quarks in events with one lepton, jets, and missing transverse momentum in root S=13 TeV pp collisions with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2017, no.8, pp.1-40, 2017 (SCI-Expanded)
- CIII. **Fiducial, total and differential cross-section measurements of t-channel single top-quark production in pp collisions at 8TeV using data collected by the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.8, 2017 (SCI-Expanded)
- CIV. **Measurement of the k(t) splitting scales in Z -> ll events in pp collisions at root s=8TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2017, no.8, 2017 (SCI-Expanded)

- CV. **Measurement of $WW/WZ \rightarrow l\nu qq'$ production with the hadronically decaying boson reconstructed as one or two jets in pp collisions at $\sqrt{s}=8$ TeV with ATLAS, and constraints on anomalous gauge couplings**
Aaboudd M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.8, 2017 (SCI-Expanded)
- CVI. **Measurements of long-range azimuthal anisotropies and associated Fourier coefficients for pp collisions at $\sqrt{s}=5.02$ and 13 TeV and p plus Pb collisions at $\sqrt{(NN)-N-s}=5.02$ TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
PHYSICAL REVIEW C, vol.96, no.2, 2017 (SCI-Expanded)
- CVII. **Search for the Dimuon Decay of the Higgs Boson in pp Collisions at $\sqrt{s}=13$ TeV with the ATLAS Detector**
Aaboud M., Aad G., Abbott B., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abrahm N. L., Abramowicz H., Abreu H., et al.
PHYSICAL REVIEW LETTERS, vol.119, no.5, 2017 (SCI-Expanded)
- CVIII. **Studies of Z gamma production in association with a high-mass dijet system in pp collisions at $\sqrt{s}=8$ TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, no.7, 2017 (SCI-Expanded)
- CIX. **Measurements of electroweak $W jj$ production and constraints on anomalous gauge couplings with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.7, 2017 (SCI-Expanded)
- CX. **Topological cell clustering in the ATLAS calorimeters and its performance in LHC Run 1**
Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.7, 2017 (SCI-Expanded)
- CXI. **Measurement of the cross section for inclusive isolated-photon production in pp collisions at $\sqrt{s}=13$ TeV using the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
PHYSICS LETTERS B, vol.770, pp.473-493, 2017 (SCI-Expanded)
- CXII. **Jet reconstruction and performance using particle flow with the ATLAS Detector**
Aaboudd M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.7, 2017 (SCI-Expanded)
- CXIII. **Measurement of $(W +/\-)W +/\-$ vector-boson scattering and limits on anomalous quartic gauge couplings with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
PHYSICAL REVIEW D, vol.96, no.1, 2017 (SCI-Expanded)
- CXIV. **Search for dark matter at $\sqrt{s}=13$ TeV in final states containing an energetic photon and large missing transverse momentum with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.6, 2017 (SCI-Expanded)
- CXV. **Measurements of integrated and differential cross sections for isolated photon pair production in**

pp collisions at root s=8 TeV with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

PHYSICAL REVIEW D, vol.95, no.11, 2017 (SCI-Expanded)

CXVI. Precision measurement and interpretation of inclusive W^+ , W^- and Z/γ^* production cross sections with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., AbouZeid O., Abraham N., Abramowicz H., Abreu H., et al.

European Physical Journal C, vol.77, no.6, 2017 (SCI-Expanded)

CXVII. Measurement of multi-particle azimuthal correlations in pp, p plus Pb and low-multiplicity Pb plus Pb collisions with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.77, no.6, 2017 (SCI-Expanded)

CXVIII. Measurement of jet fragmentation in Pb+Pb and pp collisions at $\sqrt{s_{NN}}=2.76$ TeV with the ATLAS detector at the LHC

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S., AbouZeid O., Abraham N., Abramowicz H., et al.

European Physical Journal C, vol.77, no.6, 2017 (SCI-Expanded)

CXIX. Measurement of forward-backward multiplicity correlations in lead-lead, proton-lead, and proton-proton collisions with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

PHYSICAL REVIEW C, vol.95, no.6, 2017 (SCI-Expanded)

CXX. Performance of the ATLAS trigger system in 2015

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.77, no.5, 2017 (SCI-Expanded)

CXXI. Measurements of the production cross section of a Z boson in association with jets in pp collisions at root s=13 TeV with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.77, no.6, 2017 (SCI-Expanded)

CXXII. Reconstruction of primary vertices at the ATLAS experiment in Run 1 proton-proton collisions at the LHC

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.77, no.5, 2017 (SCI-Expanded)

CXXIII. Measurements of top-quark pair differential cross-sections in the e mu channel in pp collisions at root s=13 TeV using the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.77, no.5, 2017 (SCI-Expanded)

CXXIV. Performance of the ATLAS Transition Radiation Tracker in Run 1 of the LHC: tracker properties

Aaboud M., Collaboration A. T. L. A. S., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., et al.

JOURNAL OF INSTRUMENTATION, vol.12, 2017 (SCI-Expanded)

CXXV. High-E-T isolated-photon plus jets production in pp collisions at root s=8 TeV with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

NUCLEAR PHYSICS B, vol.918, pp.257-316, 2017 (SCI-Expanded)

CXXVI. Measurement of the $t(\bar{t})$ over-bar production cross section in the tau plus jets final state in pp collisions at root s=8 TeV using the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

PHYSICAL REVIEW D, vol.95, no.7, 2017 (SCI-Expanded)

CXXVII. Performance of algorithms that reconstruct missing transverse momentum in root s=8 TeV proton-proton collisions in the ATLAS detector

Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., Abolins M., AbouZeid O. S., Abrarnowicz H., Abreu H., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.77, no.4, 2017 (SCI-Expanded)

CXXVIII. Probing the W $t\bar{b}$ vertex structure in t-channel single-top-quark production and decay in pp collisions at root s=8 TeV with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2017, no.4, 2017 (SCI-Expanded)

CXXIX. Measurement of the inclusive cross-sections of single top-quark and top-antiquark t-channel production in pp collisions at root s=13 TeV with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2017, no.4, 2017 (SCI-Expanded)

CXXX. Measurement of the W boson polarisation in $t(\bar{t})$ over-barevents from pp collisions at root s=8 TeV in the lepton plus jets channel with ATLAS

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.77, no.4, 2017 (SCI-Expanded)

CXXXI. Measurement of jet activity produced in top-quark events with an electron, a muon and two b-tagged jets in the final state in pp collisions root s=13TeV with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.77, no.4, 2017 (SCI-Expanded)

CXXXII. Electron efficiency measurements with the ATLAS detector using 2012 LHC proton-proton collision data

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu I., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.77, no.3, 2017 (SCI-Expanded)

CXXXIII. Measurements of top quark spin observables in $t\bar{t}$ events using dilepton final states in root s=8 TeV pp collisions with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2017, no.3, 2017 (SCI-Expanded)

CXXXIV. Search for triboson (WWW $-/+$)- W - $+/-$)- W - $+/-$ production in pp collisions at root s=8 TeV with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.77, no.3, 2017 (SCI-Expanded)

CXXXV. Measurement of charged-particle distributions sensitive to the underlying event in root s=13 TeV proton-proton collisions with the ATLAS detector at the LHC

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2017, no.3, 2017 (SCI-Expanded)

- CXXXVI. **Search for new phenomena in events containing a same-flavour opposite-sign dilepton pair, jets, and large missing transverse momentum in root s=13 TeV pp collisions with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.3, 2017 (SCI-Expanded)
- CXXXVII. **Measurements of top-quark pair to Z-boson cross-section ratios at root s=13, 8, 7 TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Abidi S. H., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2017, no.2, pp.1-54, 2017 (SCI-Expanded)
- CXXXVIII. **Measurement of the prompt J/psi pair production cross-section in pp collisions at root s=8 TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.2, 2017 (SCI-Expanded)
- CXXXIX. **Search for dark matter in association with a Higgs boson decaying to b-quarks in pp collisions at root s=13 TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
PHYSICS LETTERS B, vol.765, pp.11-31, 2017 (SCI-Expanded)
- CXL. **Search for lepton-flavour-violating decays of the Higgs and Z bosons with the ATLAS detector**
Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., Abolins M., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.2, 2017 (SCI-Expanded)
- CXLI. **Search for anomalous electroweak production of WW/WZ in association with a high-mass dijet system in pp collisions at root S=8 TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
PHYSICAL REVIEW D, vol.95, no.3, 2017 (SCI-Expanded)
- CXLII. **Measurement of W boson angular distributions in events with high transverse momentum jets at root s=8 TeV using the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
PHYSICS LETTERS B, vol.765, pp.132-153, 2017 (SCI-Expanded)
- CXLIII. **Search for new resonances decaying to a W or Z boson and a Higgs boson in the l(+)-l(-)b(b)over-bar, l nu b(b)over-bar, and nu(nu)over-barb(b)over-bar channels with pp collisions at root s=13 TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
PHYSICS LETTERS B, vol.765, pp.32-52, 2017 (SCI-Expanded)
- CXLIV. **Measurements of charge and CP asymmetries in b-hadron decays using top-quark events collected by the ATLAS detector in pp collisions at root s=8 TeV**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2017, no.2, 2017 (SCI-Expanded)
- CXLV. **Measurement of the t(t)over-barZ and t(t)over-barW production cross sections in multilepton final states using 3.2 fb(-1) of pp collisions at root s=13 TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.77, no.1, 2017 (SCI-Expanded)
- CXLVI. **Measurement of the ZZ production cross section in proton-proton collisions at root s=8 TeV using**

the $ZZ \rightarrow l^{(-)} l^{(+)} l'^{(-)} l'^{(+)}$ and $ZZ \rightarrow l^{(-)} l^{(+)} \nu(\nu)\overline{\nu}$ decay channels with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2017, no.1, 2017 (SCI-Expanded)

CXLVII. Search for heavy resonances decaying to a Z boson and a photon in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

PHYSICS LETTERS B, vol.764, pp.11-30, 2017 (SCI-Expanded)

CXLVIII. Measurements of $\psi(2S)$ and $X(3872) \rightarrow J/\psi \pi^{(+)} \pi^{(-)}$ production in pp collisions at $\sqrt{s}=8$ TeV with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2017, no.1, 2017 (SCI-Expanded)

CXLIX. A measurement of the calorimeter response to single hadrons and determination of the jet energy scale uncertainty using LHC Run-1 pp-collision data with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.77, no.1, 2017 (SCI-Expanded)

CL. Measurement of the $b(b)\overline{b}$ dijet cross section in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.76, no.12, 2016 (SCI-Expanded)

CLI. Search for squarks and gluinos in events with hadronically decaying tau leptons, jets and missing transverse momentum in proton-proton collisions at $\sqrt{s}=13$ TeV recorded with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.76, no.12, 2016 (SCI-Expanded)

CLII. Measurement of $W+W^-$ production in association with one jet in proton-proton collisions at $\sqrt{s}=8$ TeV with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., Zeid O. S. A., Abraham N. L., Abramowicz H., et al.

PHYSICS LETTERS B, vol.763, pp.114-133, 2016 (SCI-Expanded)

CLIII. Measurement of the photon identification efficiencies with the ATLAS detector using LHC Run-1 data

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.76, no.12, 2016 (SCI-Expanded)

CLIV. Search for dark matter produced in association with a hadronically decaying vector boson in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid S., Abraham N. L., Abramowicz H., et al.

PHYSICS LETTERS B, vol.763, pp.251-268, 2016 (SCI-Expanded)

CLV. A measurement of material in the ATLAS tracker using secondary hadronic interactions in 7 TeV pp collisions

Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.

JOURNAL OF INSTRUMENTATION, vol.11, 2016 (SCI-Expanded)

CLVI. Luminosity determination in pp collisions at $\sqrt{s}=8$ TeV using the ATLAS detector at the LHC

- Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.12, 2016 (SCI-Expanded)
- CLVII. **Measurement of the W - \pm - Z boson pair-production cross section in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
PHYSICS LETTERS B, vol.762, pp.1-22, 2016 (SCI-Expanded)
- CLVIII. **Search for the Higgs boson produced in association with a W boson and decaying to four b -quarks via two spin-zero particles in pp collisions at 13 TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.11, 2016 (SCI-Expanded)
- CLIX. **Study of hard double-parton scattering in four-jet events in pp collisions $\sqrt{s}=7$ TeV with the ATLAS experiment**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.11, 2016 (SCI-Expanded)
- CLX. **Measurement of top quark pair differential cross sections in the dilepton channel in pp collisions at $\sqrt{s}=7$ and 8 TeV with ATLAS**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
PHYSICAL REVIEW D, vol.94, no.9, 2016 (SCI-Expanded)
- CLXI. **Search for high-mass new phenomena in the dilepton final state using proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
PHYSICS LETTERS B, vol.761, pp.372-392, 2016 (SCI-Expanded)
- CLXII. **Measurement of the $t(\bar{t})$ production cross-section using $e\mu$ events with b -tagged jets in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
PHYSICS LETTERS B, vol.761, pp.136-157, 2016 (SCI-Expanded)
- CLXIII. **Measurements of top-quark pair differential cross-sections in the lepton plus jets channel in pp collisions at $\sqrt{s}=8$ TeV using the ATLAS detector**
Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.10, 2016 (SCI-Expanded)
- CLXIV. **Performance of pile-up mitigation techniques for jets in pp collisions at $\sqrt{s}=8$ TeV using the ATLAS detector**
Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.11, 2016 (SCI-Expanded)
- CLXV. **Search for bottom squark pair production in proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.10, 2016 (SCI-Expanded)
- CLXVI. **Search for Minimal Supersymmetric Standard Model Higgs bosons H/A and for a Z' boson in the $\tau\tau$ final state produced in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS Detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L.,

- Abramowicz H., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.11, 2016 (SCI-Expanded)
- CLXVII. **Measurement of the top quark mass in the $t(\bar{t}) \rightarrow \text{dilepton}$ channel from $\sqrt{s}=8\text{TeV}$ ATLAS data**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
PHYSICS LETTERS B, vol.761, pp.350-371, 2016 (SCI-Expanded)
- CLXVIII. **Measurement of the total cross section from elastic scattering in pp collisions at $\sqrt{s}=8\text{ TeV}$ with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
PHYSICS LETTERS B, vol.761, pp.158-178, 2016 (SCI-Expanded)
- CLXIX. **Measurement of the Inelastic Proton-Proton Cross Section at $\sqrt{s}=13\text{ TeV}$ with the ATLAS Detector at the LHC**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
PHYSICAL REVIEW LETTERS, vol.117, no.18, 2016 (SCI-Expanded)
- CLXX. **Charged-particle distributions at low transverse momentum in $\sqrt{s}=13\text{ TeV}$ pp interactions measured with the ATLAS detector at the LHC**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.9, 2016 (SCI-Expanded)
- CLXXI. **The performance of the jet trigger for the ATLAS detector during 2011 data taking**
Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., Abolins M., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.10, 2016 (SCI-Expanded)
- CLXXII. **Measurement of jet activity in top quark events using the $e\mu$ final state with two b-tagged jets in pp collisions at $\sqrt{s}=8\text{ TeV}$ with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.9, 2016 (SCI-Expanded)
- CLXXIII. **Measurement of total and differential W plus w- production cross sections in proton-proton collisions at $\sqrt{s}=8\text{ TeV}$ with the ATLAS detector and limits on anomalous triple-gauge-boson couplings**
Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.9, 2016 (SCI-Expanded)
- CLXXIV. **Search for supersymmetry in a final state containing two photons and missing transverse momentum in $\sqrt{s}=13\text{ TeV}$ pp collisions at the LHC using the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.9, 2016 (SCI-Expanded)
- CLXXV. **Searches for heavy diboson resonances in pp collisions at $\sqrt{s}=13\text{ TeV}$ with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.9, 2016 (SCI-Expanded)
- CLXXVI. **Dark matter interpretations of ATLAS searches for the electroweak production of supersymmetric particles in $\sqrt{s}=8\text{ TeV}$ proton-proton collisions**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.9, 2016 (SCI-Expanded)

- CLXXVII. **Measurement of the inclusive isolated prompt photon cross section in pp collisions at root s=8 TeV with the ATLAS detector**
Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., Abolins M., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.8, pp.1-42, 2016 (SCI-Expanded)
- CLXXVIII. **Measurements of the Higgs boson production and decay rates and constraints on its couplings from a combined ATLAS and CMS analysis of the LHC pp collision data at root s=7 and 8 TeV**
Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.8, 2016 (SCI-Expanded)
- CLXXIX. **Measurement of the angular coefficients in Z-boson events using electron and muon pairs from data taken at root s=8 TeV with the ATLAS detector**
Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.8, 2016 (SCI-Expanded)
- CLXXX. **Measurement of fiducial differential cross sections of gluon-fusion production of Higgs bosons decaying to WW* -> e nu mu nu with the ATLAS detector at root s=8 TeV**
Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.8, 2016 (SCI-Expanded)
- CLXXXI. **Measurements of the charge asymmetry in top-quark pair production in the dilepton final state at root s=8 TeV with the ATLAS detector**
Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., Abolins M., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
PHYSICAL REVIEW D, vol.94, no.3, 2016 (SCI-Expanded)
- CLXXXII. **Measurement of the CP-violating phase phi(s) and the B-s(0) meson decay width difference with B-s(0) -> J/psi phi decays in ATLAS**
Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.8, 2016 (SCI-Expanded)
- CLXXXIII. **Measurement of exclusive gamma gamma -> W+W- production and search for exclusive Higgs boson production in pp collisions at root s=8 TeV using the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
PHYSICAL REVIEW D, vol.94, no.3, 2016 (SCI-Expanded)
- CLXXXIV. **Measurement of W-+/- and Z-boson production cross sections in pp collisions at root s=13 TeV with the ATLAS detector**
Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowitz H., Abreu H., et al.
PHYSICS LETTERS B, vol.759, pp.601-621, 2016 (SCI-Expanded)
- CLXXXV. **Search for charged Higgs bosons produced in association with a top quark and decaying via H-+/- -> tau nu using pp collision data recorded at root s=13 TeV by the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
PHYSICS LETTERS B, vol.759, pp.555-574, 2016 (SCI-Expanded)
- CLXXXVI. **Measurement of the double-differential high-mass Drell-Yan cross section in pp collisions at root s=8 TeV with the ATLAS detector**
Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., Abreu H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.8, 2016 (SCI-Expanded)
- CLXXXVII. **Charged-particle distributions in pp interactions at root s=8TeV measured with the ATLAS detector**

- Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., Abolins M., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.7, 2016 (SCI-Expanded)
- :LXXXVIII. **Measurement of event-shape observables in $Z \rightarrow l^{(+)}l^{(-)}$ events in pp collisions at root $s=7$ TeV with the ATLAS detector at the LHC**
Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., Abolins M., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.7, 2016 (SCI-Expanded)
- CLXXXIX. **A search for an excited muon decaying to a muon and two jets in pp collisions at root $s=8$ TeV with the ATLAS detector**
Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., et al.
NEW JOURNAL OF PHYSICS, vol.18, 2016 (SCI-Expanded)
- CXC. **Charged-particle distributions in root $s=13$ TeV pp interactions measured with the ATLAS detector at the LHC**
Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., Abolins M., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
PHYSICS LETTERS B, vol.758, pp.67-88, 2016 (SCI-Expanded)
- CXCI. **Measurements of Z gamma and Z gamma gamma production in pp collisions at root $s=8$ TeV with the ATLAS detector**
Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., Abolins M., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
PHYSICAL REVIEW D, vol.93, no.11, 2016 (SCI-Expanded)
- CXCII. **Identification of high transverse momentum top quarks in pp collisions at root $s=8$ TeV with the ATLAS detector**
Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.6, 2016 (SCI-Expanded)
- CXCIII. **A search for top squarks with R-parity-violating decays to all-hadronic final states with the ATLAS detector in root $s=8$ TeV proton-proton collisions**
Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.6, pp.1-49, 2016 (SCI-Expanded)
- CXCIV. **Measurement of $D^{*+/-}$, $D^{-+/-}$ and $D_S^{+/-}$ meson production cross sections in pp collisions at root $s=7$ TeV with the ATLAS detector**
Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.
NUCLEAR PHYSICS B, vol.907, pp.717-763, 2016 (SCI-Expanded)
- CXCV. **Measurement of the charged-particle multiplicity inside jets from root $s=8$ TeV pp collisions with the ATLAS detector**
Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., Abolins M., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.6, 2016 (SCI-Expanded)
- CXCVI. **Measurement of the relative width difference of the B^0 - \bar{B}^0 system with the ATLAS detector**
Aaboud M., Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.6, 2016 (SCI-Expanded)
- CXCVII. **Reconstruction of hadronic decay products of tau leptons with the ATLAS experiment**
Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.

- EUROPEAN PHYSICAL JOURNAL C, vol.76, no.5, 2016 (SCI-Expanded)
- CXCVIII. **Measurement of the dependence of transverse energy production at large pseudorapidity on the hard-scattering kinematics of proton-proton collisions at root $s=2.76$ TeV with ATLAS**
Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.
PHYSICS LETTERS B, vol.756, pp.10-28, 2016 (SCI-Expanded)
- CXCIX. **Muon reconstruction performance of the ATLAS detector in proton-proton collision data at root $s=13$ TeV**
Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., Abolins M., AbouZeid O. S., Abraham N. L., Abramowicz H., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.5, 2016 (SCI-Expanded)
- CC. **Measurement of the differential cross-sections of prompt and non-prompt production of J/psi and psi(2S) in pp collisions at root $s=7$ and 8 TeV with the ATLAS detector**
Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.5, 2016 (SCI-Expanded)
- CCI. **Measurement of the charge asymmetry in highly boosted top-quark pair production in root $s=8$ TeV pp collision data collected by the ATLAS experiment**
Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., et al.
PHYSICS LETTERS B, vol.756, pp.52-71, 2016 (SCI-Expanded)
- CCII. **Beam-induced and cosmic-ray backgrounds observed in the ATLAS detector during the LHC 2012 proton-proton running period**
Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., Abolins M., Abou Zeid O. S., Abraham N. L., Abramowicz H., et al.
JOURNAL OF INSTRUMENTATION, vol.11, 2016 (SCI-Expanded)
- CCIII. **Measurements of $W(+/-)Z$ production cross sections in pp collisions at root $s=8$ TeV with the ATLAS detector and limits on anomalous gauge boson self-couplings**
Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., et al.
PHYSICAL REVIEW D, vol.93, no.9, 2016 (SCI-Expanded)
- CCIV. **Observation of Long-Range Elliptic Azimuthal Anisotropies in root $s=13$ and 2.76 TeV pp Collisions with the ATLAS Detector**
Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.
PHYSICAL REVIEW LETTERS, vol.116, no.17, 2016 (SCI-Expanded)
- CCV. **A new method to distinguish hadronically decaying boosted Z bosons from W bosons using the ATLAS detector**
Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.5, 2016 (SCI-Expanded)
- CCVI. **Combination of searches for WW, WZ, and ZZ resonances in pp collisions at $s=8$ TeV with the ATLAS detector**
Aad G., Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., et al.
PHYSICS LETTERS B, vol.755, pp.285-305, 2016 (SCI-Expanded)
- CCVII. **Probing lepton flavour violation via neutrinoless tau $\rightarrow 3$ mu decays with the ATLAS detector**
Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.76, no.5, 2016 (SCI-Expanded)
- CCVIII. **Performance of b-jet identification in the ATLAS experiment**
Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et

al.

JOURNAL OF INSTRUMENTATION, vol.11, 2016 (SCI-Expanded)

CCIX. **Search for new phenomena with photon plus jet events in proton-proton collisions at root s=13 TeV with the ATLAS detector**

Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.3, 2016 (SCI-Expanded)

CCX. **Measurement of the ZZ Production Cross Section in pp Collisions at root s=13 TeV with the ATLAS Detector**

Aad G., Abbott B., Abdallah J., Abdinov O., Abeloos B., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., et al.

PHYSICAL REVIEW LETTERS, vol.116, no.10, 2016 (SCI-Expanded)

CCXI. **Dijet production in root s=7 TeV pp collisions with large rapidity gaps at the ATLAS experiment**

Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.

PHYSICS LETTERS B, vol.754, pp.214-234, 2016 (SCI-Expanded)

CCXII. **Identification of boosted, hadronically decaying W bosons and comparisons with ATLAS data taken at root s=8 TeV**

Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.76, no.3, 2016 (SCI-Expanded)

CCXIII. **Constraints on non-Standard Model Higgs boson interactions in an effective Lagrangian using differential cross sections measured in the H ->gamma gamma decay channel at root s=8 TeV with the ATLAS detector**

Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.

PHYSICS LETTERS B, vol.753, pp.69-85, 2016 (SCI-Expanded)

CCXIV. **Measurement of the differential cross-section of highly boosted top quarks as a function of their transverse momentum in root s=8 TeV proton-proton collisions using the ATLAS detector**

Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.

PHYSICAL REVIEW D, vol.93, no.3, 2016 (SCI-Expanded)

CCXV. **A search for prompt lepton-jets in pp collisions at root s=8 TeV with the ATLAS detector**

Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.2, pp.1-51, 2016 (SCI-Expanded)

CCXVI. **Measurements of four-lepton production in pp collisions at root s=8 TeV with the ATLAS detector**

Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.

PHYSICS LETTERS B, vol.753, pp.552-572, 2016 (SCI-Expanded)

CCXVII. **Measurement of the charge asymmetry in top-quark pair production in the lepton-plus-jets final state in pp collision data at root s=8 TeV with the ATLAS detector**

Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.76, no.2, 2016 (SCI-Expanded)

CCXVIII. **Measurements of the Higgs boson production and decay rates and coupling strengths using pp collision data at root s=7 and 8 TeV in the ATLAS experiment**

Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.76, no.1, 2016 (SCI-Expanded)

CCXIX. **Search for an additional, heavy Higgs boson in the H -> ZZ decay channel at root s=8 TeV in pp**

collision data with the ATLAS detector

Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.76, no.1, 2016 (SCI-Expanded)

CCXX. Searches for scalar leptoquarks in pp collisions at root s=8TeV with the ATLAS detector

Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.76, no.1, 2016 (SCI-Expanded)

CCXXI. Measurement of the correlation between the polar angles of leptons from top quark decays in the helicity basis at root s=7 TeV using the ATLAS detector

Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.

PHYSICAL REVIEW D, vol.93, no.1, 2016 (SCI-Expanded)

CCXXII. Measurement of the production cross-section of a single top quark in association with a W boson at 8 TeV with the ATLAS experiment

Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2016, no.1, pp.1-48, 2016 (SCI-Expanded)

CCXXIII. Measurements of fiducial cross-sections for t(t)over-bar production with one or two additional b-jets in pp collisions at root s=8 TeV using the ATLAS detector

Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.76, no.1, 2016 (SCI-Expanded)

CCXXIV. Search for flavour-changing neutral current top-quark decays to q Z in pp collision data collected with the ATLAS detector at root s=8 TeV

Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.

EUROPEAN PHYSICAL JOURNAL C, vol.76, no.1, 2016 (SCI-Expanded)

CCXXV. Search for flavour-changing neutral current top quark decays t -> Hq in pp collisions at root s=8 TeV with the ATLAS detector

Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2015, no.12, pp.1-65, 2015 (SCI-Expanded)

CCXXVI. Search for high-mass diboson resonances with boson-tagged jets in proton-proton collisions at root s = TeV with the ATLAS detector

Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.

JOURNAL OF HIGH ENERGY PHYSICS, vol.2015, no.12, pp.1-39, 2015 (SCI-Expanded)

CCXXVII. Searches for Higgs boson pair production in the hh -> bb tau tau, gamma gamma WW*, gamma gamma bb, bbbb channels with the ATLAS detector

Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.

PHYSICAL REVIEW D, vol.92, no.9, 2015 (SCI-Expanded)

CCXXVIII. Search for massive, long-lived particles using multitrack displaced vertices or displaced lepton pairs in pp collisions at root s=8 TeV with the ATLAS detector

Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.

PHYSICAL REVIEW D, vol.92, no.7, 2015 (SCI-Expanded)

CCXXIX. Search for type-III seesaw heavy leptons in pp collisions at root s=8 TeV with the ATLAS detector

Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.

- PHYSICAL REVIEW D, vol.92, no.3, 2015 (SCI-Expanded)
- CCXXX. **Search for a new resonance decaying to a W or Z boson and a Higgs boson in the $ll/\nu\nu$ plus $b(\bar{b})$ final states with the ATLAS detector**
Aad G., Abbott B., Abdallah J., Abdinov O., Aben R., Abolins M., AbouZeid O. S., Abramowicz H., Abreu H., Abreu R., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.75, no.6, 2015 (SCI-Expanded)
- CCXXXI. **Search for invisible particles produced in association with single-top-quarks in proton-proton collisions at $\sqrt{s}=8$ TeV with the ATLAS detector**
Aad G., Abbott B., Abdallah J., Khalek S. A., Abdinov O., Aben R., Abi B., Abolins M., AbouZeid O. S., Abramowicz H., et al.
EUROPEAN PHYSICAL JOURNAL C, vol.75, no.2, 2015 (SCI-Expanded)
- CCXXXII. **Measurement of Higgs boson production in the diphoton decay channel in pp collisions at center-of-mass energies of 7 and 8 TeV with the ATLAS detector**
Aad G., Abbott B., Abdallah J., Khalek S. A., Abdinov O., Aben R., Abi B., Abolins M., AbouZeid O. S., Abramowicz H., et al.
PHYSICAL REVIEW D, vol.90, no.11, 2014 (SCI-Expanded)
- CCXXXIII. **Search for nonpointing and delayed photons in the diphoton and missing transverse momentum final state in 8 TeV pp collisions at the LHC using the ATLAS detector**
Aad G., Abbott B., Abdallah J., Khalek S. A., Abdinov O., Aben R., Abi B., Abolins M., AbouZeid O. S., Abramowicz H., et al.
PHYSICAL REVIEW D, vol.90, no.11, 2014 (SCI-Expanded)
- CCXXXIV. **Search for neutral Higgs bosons of the minimal supersymmetric standard model in pp collisions at $\sqrt{s}=8$ TeV with the ATLAS detector**
Aad G., Abbott B., Abdallah J., Khalek S. A., Abdinov O., Aben R., Abi B., Abolins M., AbouZeid O. S., Abramowicz H., et al.
JOURNAL OF HIGH ENERGY PHYSICS, vol.2014, no.11, pp.1-47, 2014 (SCI-Expanded)

Articles Published in Other Journals

- I. **HYDROGEN PRODUCTION from HYDRAZINE on SOME TRANSITION METAL (Sc, Ti and V) -EMBEDDED GRAPHENE**
KÜÇÜK H.
Journal of scientific reports-A (Online), vol.0, no.047, pp.184-196, 2021 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **KARBON SALINIMSIZ TEMİZ ENERJİ ÜRETİMİ: HİDROJEN ENERJİ VE TERMAL ENERJİ DEPOLAMA KÜÇÜK H.**
in: TEKNOBİLİM-2022 Enerji Krizi ve Yenilenebilir Enerji, Ceren Karaman, Editor, efe akademi yayınları, İstanbul, pp.55-72, 2022
- II. **ARAŞTIRMACILAR VE TEKNOLOJİ ÇEVRESEL YIKIMI AVANTAJA DÖNÜŞTÜREBİLİR Mİ? KARBONDİOKSİT TEKNOLOJİSİ**
KÜÇÜK H.
in: Fen Bilimleri ve Matematik Alanında Yeni Trendler, Hüsnüye SAĞLIKER, Editor, Duvar Yayınları, İzmir, pp.195-208, 2022

Refereed Congress / Symposium Publications in Proceedings

- I. **Catch the Heat!**
Tranca I., Shkatulov A., GENÇ A. E., KÜÇÜK H., de Boek H., Linder M., Tielens F.
The 19th International Conference on Density Functional Theory and its Applications (DFT2022), Brussels, Belgium, 28 August - 02 September 2022, pp.186
- II. **The methane to methanol conversion reaction on the Fe-embedded N4 graphene surface**
AKÇA A., KÜÇÜK H.
International Conference on New Trends in Science and Applications, Turkey, 12 - 13 October 2021
- III. **Methane Adsorption on MN-N-C Monolayer Materials in The Presence of O₂ Molecules With DFT Theory Including VAN DER WAALS Interaction**
KÜÇÜK H., AKÇA A.
I. INTERNATIONAL CONFERENCE OF PHYSICS, Ankara, Turkey, 17 August 2021, pp.76
- IV. **Hydrazine trapping ability of Ti-N₄ and Cr-N₄ Graphene-based catalyst**
KÜÇÜK H.
8th International Conference on Materials Science and Nanotechnology For Next Generation (MSNG-2021), Turkey, 14 - 16 July 2021
- V. **Hydrazine borane trapping ability of TMN₄ and TMN₃ Graphene-embedded by Cu catalyst**
KÜÇÜK H.
3rd International Hydrogen Energy Congress & Exhibitions IHEC 2021, Ankara, Turkey, 14 - 16 June 2021
- VI. **CH₄ trapping ability of double vacancy graphene Cu-embedded surface: A DFT study**
KÜÇÜK H.
II International Advanced Study Conference Condensed Matter and Low Temperature Physic 2021s, Kharkiv, Ukraine, 6 - 12 June 2021
- VII. **Low Mu Run analysis on Measurement of the 2012 Inclusive Jet Cross Section in pp collisions at p_s =8 TeV using the ATLAS detector**
KÜÇÜK H.
IOP 2014 Joint HEPP & APP Group Meeting, London, Canada, 07 April 2014, pp.16

Supported Projects

Küçük H., FP1 Project, THERMODYNAMIC DESCRIPTOR FOR DEHYDRATION/HYDRATION OF SALT HYDRATES FROM STRUCTURAL PARAMETERS, 2022 - 2023

Küçük H., Campanelli M., EU Supported Other Project, ATLAS project in LHC, 2010 - 2016

Metrics

Publication: 246

Citation (WoS): 5538

Citation (Scopus): 12499

H-Index (WoS): 42

H-Index (Scopus): 61

Congress and Symposium Activities

Low-x Conference, Invited Speaker, Zabrze, Poland, 2015

Hadronic Calibration Workshop (Workshop), Chicago-US, Invited Speaker, California, United States Of America, 2013

Scholarships

Doktora bursu, University, 2015 - 2016
YLSY, Ministry of Education, 2007 - 2015

Non Academic Experience

Nottingham Universitesi

Eindhoven technical university

CERN (The European Organization for Nuclear Research)