

Europass Curriculum Vitae



Personal information

First name(s) / Surname(s)	André João Maurício Leitão do Valle Wemans	
Address(es)	R. Melo Antunes N37 5 A 1750-240 Lisboa Portugal	
Telephone(s)	+351 217 571 048	Mobile: +351 934 666 801
E-mail	awemans@gmail.com	
Nationality	Portuguese	
Date of birth	September 18, 1971	
Gender	Male	

Work experience

Dates	November 2009 onwards	
Occupation or position held	Assistant Professor at Physics Department	
Main activities and responsibilities	Laboratorial and lecture classes in Mechanic Physic, Thermodynamics, Computational and simulation in Physics. Research and development on Cold Plasmas, Sputtering, Thin Films and Surface Science.	
Name and address of employer	Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa Quinta da Torre 2829-516 Caparica Portugal	
Type of business or sector	University	
Dates	October 2004 – September 2008	
Occupation or position held	PhD student with grant from “Fundação para a Ciência e Tecnologia” of Education and Science Portuguese Ministry.	
Main activities and responsibilities	Project and implementation of modifications in high vacuum system and hollow magnetron cathode. Study and analyses of the electrical characteristics of the cold plasma with pressure and atmosphere composition. Optical emission spectroscopy integration with the system for automatic and simultaneous acquisition of electrical characteristics and optical emission spectrum of the discharge for different pressures and gas composition. Thin film deposition and analyses.	
Name and address of employer	Fundação para a Ciência e Tecnologia Av. D. Carlos I 1249-074 Lisboa Portugal	
Type of business or sector	Governmental/Research	

Dates	July 2003 – November 2009
Occupation or position held	Invited Assistant at Physics Department
Main activities and responsibilities	Laboratorial and problem solving classes in Mechanic and Thermodynamic Physics.
Name and address of employer	Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa Quinta da Torre 2829-516 Caparica Portugal
Type of business or sector	University
Dates	November 2000 – November 2003
Occupation or position held	Research Assistant in project “Abnormal glow discharge spectroscopy with spatial resolution”, POCTI/FIS/36296/99
Main activities and responsibilities	Research the best parameters for production of TiN thin films by hollow magnetron cathode in cylindrical steel substrates. Thin film analyses by x-ray diffraction, atomic force microscopy and adhesion pull test. Acquisition and analyses of optical emission spectroscopy with space resolution with planar magnetron cathodes
Name and address of employer	CEFITEC (Centro de Física Tecnológica) - Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa Quinta da Torre 2829-516 Caparica Portugal
Type of business or sector	University
Dates	March 1999 – July 2003
Occupation or position held	Monitor
Main activities and responsibilities	Laboratorial and problem solving classes in Mechanic and thermodynamic Physics.
Name and address of employer	Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa Quinta da Torre 2829-516 Caparica Portugal
Type of business or sector	University
Dates	March 1999 – September 2000
Occupation or position held	Research Assistant of Faculdade de Ciências e Tecnologia/ Universidade Nova de Lisboa in project “ECOCLIMAT” (PEDIP II)
Main activities and responsibilities	Participated in project, drawing and construction of 3 high vacuum systems and magnetron cathodes. Participated in research of reactive discharge parameters for selective Aluminum Nitrate thin film in heat pipes. Participated in projecting and building of 3 types of solar Compound Parabolic Collectors.
Name and address of employer	Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa Quinta da Torre 2829-516 Caparica Portugal
Type of business or sector	University

Dates	April 1997 – March 1999
Occupation or position held	Research Technician with grant from Portuguese Science and Technology Ministry in project “Calorimetry for LHC – ATLAS”, sub project “Aluminization of WLS optical Fibers”
Main activities and responsibilities	Performed the project, building and testing of two Planar Magnetron Cathodes and the study for best experimental discharge parameters with modification of the R&D high vacuum system. Participated in the rotting of the optical fibers of Modulo 0 in 1998 in CERN. Projected and managed the construction of mass production high vacuum system which produced the aluminum mirror in the top of 600.000 WLS optical fibers for TILECAL/ATLAS detector in CERN. Studied the Aluminum – Polymer interface with focus on reflectivity and roughness of the surface.
Name and address of employer	CEFITEC (Centro de Física Tecnológica) - Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa Quinta da Torre 2829-516 Caparica Portugal
Type of business or sector	University
Dates	February 1997 – December 1997
Occupation or position held	Integrated the project “Implementation of thin film production didactic system” for CRIOLAB and Universidade da Madeira
Main activities and responsibilities	Project and assemble of two magnetron cathodes and a power supply for abnormal glow discharges
Name and address of employer	CEFITEC (Centro de Física Tecnológica) - Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa Quinta da Torre 2829-516 Caparica Portugal
Type of business or sector	University

Education and training

Dates	2004 - 2009
Title of qualification awarded	PhD in Physical Engineering
Principal subjects/occupational skills covered	Thesis Title “Abnormal Glow Discharges with Magnetron Cathode – Reactive Discharges” Reactive abnormal glow discharges Optical emission spectroscopy Thin film production and study
Name and type of organisation providing education and training	Universidade Nova de Lisboa
Dates	1998 - 2000
Title of qualification awarded	Master in Surface Science and Engineering (Before Bologna)
Principal subjects/occupational skills covered	Thesis Title “Polymer / Aluminum interface for Hadronic Calorimeter TILECAL/ATLAS” Abnormal Glow Discharges for thin film deposition
Name and type of organisation providing education and training	Universidade Nova de Lisboa
Dates	September 1998
Title of course	Introduction to Accelerators
Principal subjects/occupational skills covered	Particle Accelerators technology
Name and type of organisation providing education and training	CERN Accelerator School

Dates	1990 - 1996
Title of qualification awarded	Physics Engineering (Before Bologna)
Principal subjects/occupational skills covered	Final year research project on "Aluminization of WLS optical Fibers" Abnormal Glow Discharges for thin film deposition
Name and type of organisation providing education and training	Universidade Nova de Lisboa

Other research and scientific activities

Date	May 2013 onwards
Activity	Member of organizing committee of European Vacuum Conference 2014
Date	2009
Activity	Referee to international journal - Vacuum

Other academic activities

Date	2012
Activity	Jury of European BEST Engineering Competition Almada
Other information	http://best.fct.unl.pt/en/best-almada.html
Date	2012
Activity	Evaluation Panel of Master thesis
Thesis Title	"Temperature dependence of secondary electron emission yield in amorphous Carbon samples"
Author	Ms. Sara Candeias
University	Universidade Nova de Lisboa
Date	2012
Activity	Evaluation Panel of Master thesis
Thesis Title	"Optical emission spectroscopy in cold plasmas applied to nanostructured materials production"
Author	Mr. Jorge de Souto Martins
University	Universidade Nova de Lisboa
Date	February 2011 onwards
Activity	Coordinator of Mechanic Physics laboratories
Date	2004
Activity	Evaluation panel of Graduation research project
Thesis Title	"Optical emission spectroscopy in abnormal glow discharges. System automatization and integration"
Author	Mr. Miguel Filipe de Andrade Pestana da Silva
University	Universidade Nova de Lisboa
Date	2003 - 2004
Activity	Academic supervision of graduation research project
Project Title	"Optical emission spectroscopy in abnormal glow discharges. System automatization and integration"
Author	Mr. Miguel Filipe de Andrade Pestana da Silva
University	Universidade Nova de Lisboa

Mother tongue(s)

Portuguese

Other language(s)

Self-assessment

European level ()*

English

Spanish

French

Latin

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C1	Proficient user	C1	Proficient user	B2	Independent user	C1	Proficient user	C1	Proficient user
B2	Independent user	B2	Independent user	A1	Basic user	A1	Basic user	A1	Basic user
B1	Independent user	A2	Basic user	X		X		X	
A1	Basic user	A1	Basic user	A1	Basic user	A1	Basic user	A2	Basic user

(*) [Common European Framework of Reference for Languages](#)

Social skills and competences

Team work: Participated in international projects with several teams (Atlas Collaboration) and in several national and university level collaborations.

Organisational skills and competences

Project definition and management: Participated in project definition and task management in several projects.

Technical skills and competences

Computer-aided Design (CAD) in 2D and 3D
Atomic Force Microscopy – Topographic, Lateral Force
High Vacuum design
Leak detection
Residual gas analyses

Computer skills and competences

Experienced user in Mathematica, Labview and C.
Medium level in Word, Excel, PowerPoint, Access, C++
Basic level in Project, Molflow+, SynRad

Driving licence

Portuguese Driver licence for Category B Vehicles

Annexes

Publication and communication list

Annex - Publications and Communications

THESES

1. PhD thesis “Descargas luminiscente anómalas – Descargas Reactivas”, Universidade Nova de Lisboa (2009).
2. MSc thesis “Interface Polímero/Alumínio para o Calorímetro Hadrónico TILECAL/ATLAS”, Universidade Nova de Lisboa (2000).

PAPERS IN INTERNATIONAL JOURNALS

1. G. Aad, et al., “The ATLAS Experiment at the CERN Large Hadron Collider”, *Journal of Instrumentation*, **3**, (2008)
2. Y. Nunes, et al., “Dual DC magnetron cathode co-deposition of (Al,Ti) and (Al,Ti,N) thin films with controlled depth composition”, *Vacuum*, **81**, (11-12), 1503-1506 (2007)
3. Y. Nunes, A. Wemans, P. R. Gordo, M. R. Teixeira and M. J. P. Maneira, “Breakdown in planar magnetron discharges of argon on copper”, *Vacuum*, **81**, (11-12), 1511-1514 (2007)
4. Y. Nunes, A. Wemans, P. R. Gordo and M. J. P. Maneira, “The influence of magnetic confinement in DC abnormal-glow discharges”, *Vacuum*, **81**, (11-12), 1498-1502 (2007)
5. C. Marques, et al., “Characterization of nickel implanted alpha-Al(2)O(3)”, *Advanced Materials Forum* lii, Pts 1 and 2, **514-516**, 348-352 (2006)
6. C. Marques, et al., “Optical properties tailoring by high fluence implantation of Ag ions on sapphire”, *Nuclear Instruments & Methods in Physics Research Section B-Beam Interactions with Materials and Atoms*, **242**, (1-2), 104-108 (2006)
7. C. Marques, et al., “Site location and optical properties of Eu implanted sapphire”, *Nuclear Instruments & Methods in Physics Research Section B-Beam Interactions with Materials and Atoms*, **240**, (1-2), 409-414 (2005)
8. J. G. Saraiva, A. Wemans, M. J. P. Maneira, A. Maio and J. Patriarca, “The aluminization of 600 k WLS fibers for the TileCal/ATLAS/LHC”, *IEEE Transactions on Nuclear Science*, **51**, (3), 1235-1241 (2004)

PAPERS IN INTERNATIONAL JOURNALS FROM ATLAS COLABORATION

1. ATLAS Collaboration, “Search for a heavy narrow resonance decaying to $e\mu$, $e\tau$, or $\mu\tau$ with the ATLAS detector in pp collisions at the LHC,” *Physics Letters B*, vol. 723, no. 1–3, pp. 15–32, Jun. 2013.
2. ATLAS Collaboration, G. Aad, T. Abajyan, et al., “Measurements of $W\gamma$ and $Z\gamma$ production in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector at the LHC,” *Phys. Rev. D*, vol. 87, no. 11, p. 112003, Jun. 2013.
3. ATLAS Collaboration, G. Aad, T. Abajyan, et al., “Measurement of $W^{+}W^{-}$ production in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector and limits on anomalous WWZ and $WW\gamma$ couplings,” *Phys. Rev. D*, vol. 87, no. 11, p. 112001, Jun. 2013.
4. G. Aad, T. Abajyan, B. Abbott, et al., “Search for a light charged Higgs boson in the decay channel $H^{+} \rightarrow c\bar{s}$ in $t\bar{t}$ events using pp collisions at $\sqrt{s} = 7$ TeV with the ATLAS detector,” *Eur. Phys. J. C*, vol. 73, no. 6, pp. 1–20, Jun. 2013.
5. ATLAS Collaboration, “Search for long-lived, multi-charged particles in pp collisions at using the ATLAS detector,” *Physics Letters B*, vol. 722, no. 4–5, pp. 305–323, May 2013.
6. ATLAS Collaboration, G. Aad, T. Abajyan, et al., “Observation of Associated Near-Side and Away-Side Long-Range Correlations in $\sqrt{s_{NN}}=5.02$ TeV Proton-Lead Collisions with the ATLAS Detector,” *Phys. Rev. Lett.*, vol. 110, no. 18, p. 182302, May 2013.
7. G. Aad, T. Abajyan, B. Abbott, et al., “Measurement of k_T splitting scales in $W \rightarrow \ell\nu$ events at $\sqrt{s} = 7$ TeV with the ATLAS detector,” *Eur. Phys. J. C*, vol. 73, no. 5, pp. 1–30, May 2013.
8. ATLAS Collaboration, “Search for single t -quark production with the ATLAS detector at,” *Physics Letters B*, vol. 721, no. 4–5, pp. 171–189, Apr. 2013.
9. ATLAS Collaboration, “Search for displaced muonic lepton jets from light Higgs boson decay in proton–proton collisions at with the ATLAS detector,” *Physics Letters B*, vol. 721, no. 1–3, pp. 32–50, Apr. 2013.
10. G. Aad, T. Abajyan, B. Abbott, et al., “Search for WH production with a light Higgs boson decaying to prompt electron-jets in proton–proton collisions at $\sqrt{s}=7$ TeV with the ATLAS detector,” *New J. Phys.*, vol. 15, no. 4, p. 043009, Apr. 2013.
11. G. Aad, T. Abajyan, B. Abbott, et al., “Search for dark matter candidates and large extra dimensions in events with a jet and missing transverse momentum with the ATLAS detector,” *J. High Energ. Phys.*, vol. 2013, no. 4, pp. 1–51, Apr. 2013.
12. G. Aad, T. Abajyan, B. Abbott, et al., “Search for extra dimensions in diphoton events from proton–proton collisions at $\sqrt{s} = 7$, TeV in the ATLAS detector at the LHC,” *New J. Phys.*, vol. 15, no. 4, p. 043007, Apr. 2013.
13. G. Aad, T. Abajyan, B. Abbott, et al., “Searches for heavy long-lived sleptons and R-hadrons with the ATLAS detector in pp collisions at,” *Physics Letters B*, vol. 720, no. 4–5, pp. 277–308, Mar. 2013.
14. G. Aad, T. Abajyan, B. Abbott, et al., “Measurement of angular correlations in Drell–Yan lepton pairs to probe boson transverse momentum at with the ATLAS detector,” *Physics Letters B*, vol. 720, no. 1–3, pp. 32–51, Mar. 2013.
15. G. Aad, T. Abajyan, B. Abbott, et al., “Search for light top squark pair production in final states with leptons and b-jets with the ATLAS detector in proton–proton collisions,” *Physics Letters B*, vol. 720, no. 1–3, pp. 13–31, Mar. 2013.
16. ATLAS Collaboration, G. Aad, T. Abajyan, et al., “Measurement of ϵ production in 7 TeV pp collisions at ATLAS,” *Phys. Rev. D*, vol. 87, no. 5, p. 052004, Mar. 2013.
17. ATLAS Collaboration, G. Aad, T. Abajyan, et al., “Search for new phenomena in events with three charged leptons at $\sqrt{s}=7$ TeV with the ATLAS detector,” *Phys. Rev. D*, vol. 87, no. 5, p. 052002, Mar. 2013.
18. G. Aad, B. Abbott, J. Abdallah, et al., “Jet energy measurement with the ATLAS detector in proton-proton collisions at $\sqrt{s}=7$ TeV,” *Eur. Phys. J. C*, vol. 73, no. 3, pp. 1–118, Mar. 2013.

19. G. Aad, B. Abbott, J. Abdallah, et al., "Single hadron response measurement and calorimeter jet energy scale uncertainty with the ATLAS detector at the LHC," *Eur. Phys. J. C*, vol. 73, no. 3, pp. 1–34, Mar. 2013.
20. G. Aad, T. Abajyan, B. Abbott, et al., "Measurement of hard double-parton interactions in $W(\rightarrow \ell\nu) + 2\text{-jet}$ events at $\sqrt{s}=7$ TeV with the ATLAS detector," *New J. Phys.*, vol. 15, no. 3, p. 033038, Mar. 2013.
21. G. Aad, T. Abajyan, B. Abbott, et al., "Multi-channel search for squarks and gluinos in $\sqrt{s}=7$ TeV pp collisions with the ATLAS detector at the LHC," *Eur. Phys. J. C*, vol. 73, no. 3, pp. 1–33, Mar. 2013.
22. G. Aad, T. Abajyan, B. Abbott, et al., "Measurement of ZZ production in pp collisions at $\sqrt{s}=7$ TeV and limits on anomalous ZZZ and ZZ γ couplings with the ATLAS detector," *J. High Energy Phys.*, vol. 2013, no. 3, pp. 1–48, Mar. 2013.
23. G. Aad, T. Abajyan, B. Abbott, et al., "Search for charged Higgs bosons through the violation of lepton universality in \overline{t} events using pp collision data at $\sqrt{s}=7$ TeV with the ATLAS experiment," *J. High Energy Phys.*, vol. 2013, no. 3, pp. 1–36, Mar. 2013.
24. G. Aad, T. Abajyan, B. Abbott, et al., "Measurement of the $t\bar{t}$ production cross section in the tau + jets channel using the ATLAS detector," *Eur. Phys. J. C*, vol. 73, no. 3, pp. 1–18, Mar. 2013.
25. G. Aad, T. Abajyan, B. Abbott, et al., "Jet energy resolution in proton-proton collisions at $\sqrt{s}=7$ TeV recorded in 2010 with the ATLAS detector," *Eur. Phys. J. C*, vol. 73, no. 3, pp. 1–27, Mar. 2013.
26. G. Aad, B. Abbott, J. Abdallah, et al., "Measurement of the jet radius and transverse momentum dependence of inclusive jet suppression in lead–lead collisions at with the ATLAS detector," *Physics Letters B*, vol. 719, no. 4–5, pp. 220–241, Feb. 2013.
27. G. Aad, T. Abajyan, B. Abbott, et al., "A search for prompt lepton-jets in pp collisions at with the ATLAS detector," *Physics Letters B*, vol. 719, no. 4–5, pp. 299–317, Feb. 2013.
28. G. Aad, T. Abajyan, B. Abbott, et al., "A search for high-mass resonances decaying to in pp collisions at with the ATLAS detector," *Physics Letters B*, vol. 719, no. 4–5, pp. 242–260, Feb. 2013.
29. G. Aad, T. Abajyan, B. Abbott, et al., "Search for supersymmetry in events with photons, bottom quarks, and missing transverse momentum in proton–proton collisions at a centre-of-mass energy of 7 TeV with the ATLAS detector," *Physics Letters B*, vol. 719, no. 4–5, pp. 261–279, Feb. 2013.
30. G. Aad, T. Abajyan, B. Abbott, et al., "Search for long-lived, heavy particles in final states with a muon and multi-track displaced vertex in proton–proton collisions at with the ATLAS detector," *Physics Letters B*, vol. 719, no. 4–5, pp. 280–298, Feb. 2013.
31. ATLAS Collaboration, G. Aad, T. Abajyan, et al., "Measurement of the Λ_{b}^{0} lifetime and mass in the ATLAS experiment," *Phys. Rev. D*, vol. 87, no. 3, p. 032002, Feb. 2013.
32. G. Aad, T. Abajyan, B. Abbott, et al., "Search for the neutral Higgs bosons of the minimal supersymmetric standard model in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector," *J. High Energy Phys.*, vol. 2013, no. 2, pp. 1–47, Feb. 2013.
33. G. Aad, T. Abajyan, B. Abbott, et al., "Measurement of the flavour composition of dijet events in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector," *Eur. Phys. J. C*, vol. 73, no. 2, pp. 1–30, Feb. 2013.
34. G. Aad, T. Abajyan, B. Abbott, et al., "Search for pair production of heavy top-like quarks decaying to a high- W boson and a b quark in the lepton plus jets final state at with the ATLAS detector," *Physics Letters B*, vol. 718, no. 4–5, pp. 1284–1302, Jan. 2013.
35. ATLAS Collaboration, G. Aad, T. Abajyan, et al., "Search for squarks and gluinos with the ATLAS detector in final states with jets and missing transverse momentum using 4.7 fb⁻¹ of $\sqrt{s}=7$ TeV proton-proton collision data," *Phys. Rev. D*, vol. 87, no. 1, p. 012008, Jan. 2013.
36. ATLAS Collaboration, G. Aad, T. Abajyan, et al., "Measurement of Z Boson Production in Pb-Pb Collisions at $\sqrt{s_{NN}}=2.76$ TeV with the ATLAS Detector," *Phys. Rev. Lett.*, vol. 110, no. 2, p. 022301, Jan. 2013.
37. G. Aad, T. Abajyan, B. Abbott, et al., "Search for direct production of charginos and neutralinos in events with three leptons and missing transverse momentum in pp collisions with the ATLAS detector," *Physics Letters B*, vol. 718, no. 3, pp. 841–859, Jan. 2013.
38. G. Aad, T. Abajyan, B. Abbott, et al., "Search for direct slepton and gaugino production in final states with two leptons and missing transverse momentum with the ATLAS detector in pp collisions at," *Physics Letters B*, vol. 718, no. 3, pp. 879–901, Jan. 2013.
39. G. Aad, T. Abajyan, B. Abbott, et al., "Search for new phenomena in the final state in pp collisions at with the ATLAS detector," *Physics Letters B*, vol. 718, no. 3, pp. 860–878, Jan. 2013.
40. ATLAS Collaboration, G. Aad, T. Abajyan, et al., "Search for contact interactions and large extra dimensions in dilepton events from pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector," *Phys. Rev. D*, vol. 87, no. 1, p. 015010, Jan. 2013.
41. ATLAS Collaboration, G. Aad, T. Abajyan, et al., "Search for Dark Matter Candidates and Large Extra Dimensions in Events with a Photon and Missing Transverse Momentum in pp Collision Data at $\sqrt{s}=7$ TeV with the ATLAS Detector," *Phys. Rev. Lett.*, vol. 110, no. 1, p. 011802, Jan. 2013.
42. G. Aad, T. Abajyan, B. Abbott, et al., "Measurement of isolated-photon pair production in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector," *J. High Energy Phys.*, vol. 2013, no. 1, pp. 1–42, Jan. 2013.
43. G. Aad, T. Abajyan, B. Abbott, et al., "Search for resonances decaying into top-quark pairs using fully hadronic decays in pp collisions with ATLAS at $\sqrt{s}=7$ TeV," *J. High Energy Phys.*, vol. 2013, no. 1, pp. 1–50, Jan. 2013.
44. G. Aad, T. Abajyan, B. Abbott, et al., "ATLAS search for new phenomena in dijet mass and angular distributions using pp collisions at $\sqrt{s}=7$ TeV," *J. High Energy Phys.*, vol. 2013, no. 1, pp. 1–46, Jan. 2013.
45. G. Aad, T. Abajyan, B. Abbott, et al., "Search for direct chargino production in anomaly-mediated supersymmetry breaking models based on a disappearing-track signature in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector," *J. High Energy Phys.*, vol. 2013, no. 1, pp. 1–34, Jan. 2013.
46. G. Aad, T. Abajyan, B. Abbott, et al., "Search for pair-produced massive coloured scalars in four-jet final states with the ATLAS detector in proton–proton collisions at $\sqrt{s}=7$ TeV," *Eur. Phys. J. C*, vol. 73, no. 1, pp. 1–20, Jan. 2013.
47. G. Aad, T. Abajyan, B. Abbott, et al., "Measurements of top quark pair relative differential cross-sections with ATLAS in pp collisions at $\sqrt{s}=7$ TeV," *Eur. Phys. J. C*, vol. 73, no. 1, pp. 1–28, Jan. 2013.
48. ATLAS Collaboration, G. Aad, T. Abajyan, et al., "Search for Magnetic Monopoles in $\sqrt{s}=7$ TeV pp Collisions with the ATLAS Detector," *Phys. Rev. Lett.*, vol. 109, no. 26, p. 261803, Dec. 2012.

49. G. Aad, T. Abajyan, B. Abbott, et al., "A Particle Consistent with the Higgs Boson Observed with the ATLAS Detector at the Large Hadron Collider," *Science*, vol. 338, no. 6114, pp. 1576–1582, Dec. 2012.
50. G. Aad, B. Abbott, J. Abdallah, et al., "Search for the Standard Model Higgs boson produced in association with a vector boson and decaying to a b-quark pair with the ATLAS detector," *Physics Letters B*, vol. 718, no. 2, pp. 369–390, Dec. 2012.
51. G. Aad, T. Abajyan, B. Abbott, et al., "Search for the Higgs boson in the decay channel at with the ATLAS detector," *Physics Letters B*, vol. 718, no. 2, pp. 391–410, Dec. 2012.
52. G. Aad, T. Abajyan, B. Abbott, et al., "Search for diphoton events with large missing transverse momentum in 7 TeV proton–proton collision data with the ATLAS detector," *Physics Letters B*, vol. 718, no. 2, pp. 411–430, Dec. 2012.
53. T. A. Collaboration, G. Aad, T. Abajyan, et al., "Search for doubly charged Higgs bosons in like-sign dilepton final states at $\sqrt{s} = 7 \text{ TeV}$ with the ATLAS detector," *Eur. Phys. J. C*, vol. 72, no. 12, pp. 1–18, Dec. 2012.
54. T. A. Collaboration, G. Aad, T. Abajyan, et al., "ATLAS search for a heavy gauge boson decaying to a charged lepton and a neutrino in pp collisions at $\sqrt{s} = 7 \text{ TeV}$," *Eur. Phys. J. C*, vol. 72, no. 12, pp. 1–23, Dec. 2012.
55. G. Aad, T. Abajyan, B. Abbott, et al., "Search for R-parity-violating supersymmetry in events with four or more leptons in $\sqrt{s}=7 \text{ TeV}$ pp collisions with the ATLAS detector," *J. High Energ. Phys.*, vol. 2012, no. 12, pp. 1–36, Dec. 2012.
56. G. Aad, T. Abajyan, B. Abbott, et al., "Search for pair production of massive particles decaying into three quarks with the ATLAS detector in $\sqrt{s}=7 \text{ TeV}$ pp collisions at the LHC," *J. High Energ. Phys.*, vol. 2012, no. 12, pp. 1–42, Dec. 2012.
57. G. Aad, T. Abajyan, B. Abbott, et al., "Search for anomalous production of prompt like-sign lepton pairs at $\sqrt{s}=7 \text{ TeV}$ with the ATLAS detector," *J. High Energ. Phys.*, vol. 2012, no. 12, pp. 1–41, Dec. 2012.
58. G. Aad, T. Abajyan, B. Abbott, et al., "Time-dependent angular analysis of the decay $B_s^0 \rightarrow J/\psi \phi$ and extraction of $\Delta\Gamma$ s and the CP-violating weak phase ϕ_s by ATLAS," *J. High Energ. Phys.*, vol. 2012, no. 12, pp. 1–34, Dec. 2012.
59. ATLAS Collaboration, G. Aad, T. Abajyan, et al., "Search for resonant top quark plus jet production in $t\bar{t} + \text{jets}$ events with the ATLAS detector in pp collisions at $\sqrt{s}=7 \text{ TeV}$," *Phys. Rev. D*, vol. 86, no. 9, p. 091103, Nov. 2012.
60. G. Aad, B. Abbott, J. Abdallah, et al., "Measurement of the b-hadron production cross section using decays to final states in pp collisions at with the ATLAS detector," *Nuclear Physics B*, vol. 864, no. 3, pp. 341–381, Nov. 2012.
61. ATLAS Collaboration, G. Aad, T. Abajyan, et al., "Search for Direct Top Squark Pair Production in Final States with One Isolated Lepton, Jets, and Missing Transverse Momentum in $\sqrt{s}=7 \text{ TeV}$ pp Collisions Using 4.7 fb^{-1} of ATLAS Data," *Phys. Rev. Lett.*, vol. 109, no. 21, p. 211803, Nov. 2012.
62. ATLAS Collaboration, G. Aad, T. Abajyan, et al., "Search for a Supersymmetric Partner to the Top Quark in Final States with Jets and Missing Transverse Momentum at $\sqrt{s}=7 \text{ TeV}$ with the ATLAS Detector," *Phys. Rev. Lett.*, vol. 109, no. 21, p. 211802, Nov. 2012.
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