

# PUBLICATIONS ATLAS – 17 JAN 2025

## article

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4. Test of CP-invariance of the Higgs boson in vector-boson fusion production and in its decay into four leptons, G. Aad *et al.*, ATLAS Collaboration, J. High Energy Phys. 2405 (2024) 105
5. Observation of  $WZ\gamma$  production in  $pp$  collisions at  $\sqrt{s} = 13$  TeV with the ATLAS detector, G. Aad *et al.*, ATLAS Collaboration, Phys. Rev. Lett 132 (2024) 021802
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1. ATLAS and CMS latest results on ttH/tH - SM@LHC 2021, **Streblor**, **Thomas**, Standard Model at the LHC 2021, , indéfini, 26 Avr - 30 Avr 2021

2020

1. The Phase-I Trigger Readout Electronics Upgrade of the ATLAS Liquid Argon Calorimeters, **E. Fortin**, ATLAS LAr Collaboration, Instrumentation for Colliding Beam Physics, Novosibirsk, Russia, 24-28 Feb 2020
2. Higgs self coupling and Higgs rare decays at FCC-hh, , Workshop FCC-France, Paris, indéfini,
3. Search for phenomena beyond the Standard Model in events with large  $b$ -jet multiplicity using the ATLAS detector at the LHC, **H. D. N. Nguyen**, 8th Conference of Large Hadron Collider Physics, Online, France, 25-30 May 2020

4. Multiplexing Firmware Prototypes for the Global Trigger System of the ATLAS Phase-II Upgrade, F. Bonini, M. Begel, H. Chen, K. Chen, M. Benoit, H. Liu, W. Yin, S. Tang, D. Matakias, H. Xu, E. Zhivun, 2020 IEEE Nuclear Science Symposium (NSS) and Medical Imaging Conference (MIC), Boston, United States, 31 Oct - 7 Nov 2020

2019

1. Low-Mass Diphoton Resonances Search With the ATLAS Detector at 13 TeV, **A. Hedef**, The 4th China LHC Physics Workshop (CLHCP 2018), Shanghai, China, 12-22 Dec 2018
2. HH prospects for HL(HE)-LHC, Yellow Report results, **Petit, Elisabeth**, HL/HE-LHC Physics Workshop: final jamboree, Genève, Suisse, 1 Mar 2019
3. Higgs boson production in association with a ttbar pair at the ATLAS experiment, **A. E. Dumitriu**, The XXVII International Workshop on Deep Inelastic Scattering and Related Subjects, Turin, Italy, 8-12 Apr 2019
4. Path towards measuring the Higgs potential, , CERN Council Open Symposium on the Update of European Strategy for Particle Physics, Grenade, indéfini,
5. Experimental prospects on di-Higgs measurements, , IRN Terascale@Annecy, Annecy, indéfini,
6. Performance of the ATLAS RPC Detector and L1 Muon Barrel Trigger at 13 TeV, **A. Hedef**, EPS-HEP Conference 2019, Ghent, Belgium, 10-17 Jul 2019
7. Measurement of ttbar with additional jets with the ATLAS detector, **T. Theveneaux-Pelzer**, European Physical Society Conference on High Energy Physics (EPS-HEP) 2019, Ghent, Belgium, 10-17 Jul 2019
8. Inclusive Diffraction at Colliders, **F. Djama**, 49th International Symposium on Multiparticle Dynamics, Santa Fe, United States, 9-13 Sep 2019
9. High Luminosity yellow report: what does HL-LHC physics look like in ATLAS and CMS?, **A. Duperrin**, 19th Lomonosov Conference on Elementary Particle Physics, Moscou, Russia, 22-28 Aou 2019
10. Higgs studies in ATLAS and CMS experiments, **K. Liu**, Workshop on Connecting Insights in Fundamental Physics: Standard Model and Beyond, Corfu, Greece, 31 Aou - 11 Sep 2019
11. Treatment of theory uncertainties for Higgs measurements and searches at ATLAS, **T. P. Calvet**, Higgs Couplings, Oxford, United Kingdom, 30 Sep - 4 Oct 2019
12. Evolution of the ATLAS analysis model for Run-3 and prospects for HL-LHC, J. Elmsheuser, C. Anastopoulos, J. Boyd, J. Catmore, H. Gray, J. A. Mcfayden, C. Meyer, A. Sfyrla, J. Strandberg, K. Suruliz, T. Theveneaux-Pelzer, 24th International Conference on Computing in High Energy and Nuclear Physics, Adelaide, Australia, 4-8 Nov 2019

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3. Performance of tracking for the ATLAS Inner Detector Upgrade program, **A. Calandri**, ATLAS France ITK Upgrade, Annecy, France, 05 Avr 2018
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5.  $t\bar{t}H$  at the LHC, **D. Madaffari**, Alps 2018, Obergurgl, Austria, 15-20 Apr 2018
6. Status of b-tagging in ATLAS and CMS, **A. Calandri**, Top LHC France 2018, Paris, France, 23-25 Mai 2018
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8. Searches for electroweak production of higgsinos with ATLAS, **R. El Kosseifi**, MASS2018: Origin of Mass at the High Energy and Intensity Frontier, Odense, Denmark, 28 May - 1 Jun 2018
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11.  $t\bar{t}H(H \rightarrow b\bar{b})$ : ATLAS & CMS latest run-2 results in the leptonic channels, **T. Theveneaux-Pelzer**, Top LHC France 2018, Paris, France, 23-25 Mai 2018
12. Top quark properties and mass measurements with the ATLAS detector, **K. De Vasconcelos Corga**, QCD@LHC 2018, Dresden, Germany, 27-31 Aou 2018

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14. Observation of ttH production with ATLAS, **F. Hubaut**, 11th International Workshop on Top Quark Physics, Bad Neuenahr, Germany, 16-21 Sep 2018
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16. Search for Vector like Quarks, **R. Kukla**, The 25th International Conference on Supersymmetry and the Unification of Fundamental Interactions, Mumbai, India, 11-15 Dec 2017
17. Development of the ATLAS Liquid Argon Calorimeter Readout Electronics for the HL-LHC, **H. Xu**, 2018 IEEE Nuclear Science Symposium and Medical Imaging Conference (NSS/MIC 2018), Sydney, Australia, 10-17 Nov 2018

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5. Recent ATLAS results, **C. Diaconu**, 20th Planck Conference from Kazimierz to Warsaw (Planck 2017), Warsaw, Poland, 22-25 Mai 2017
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9. The ATLAS Experiment at the LHC Collider, **F. Djama**, EIGHTEENTH LOMONOSOV CONFERENCE ON ELEMENTARY PARTICLE PHYSICS, Moscow, Russia, 24-30 Aug 2017

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11. Perspectives of Higgs measurements at High-Luminosity LHC, **A. Calandri**, International Workshop on Future Linear Colliders, LCWS2017, Strasbourg, France, 23-27 Oct 2017
12. Direct top-quark decay width measurement in the  $t\bar{t}$  lepton+jets channel at  $\sqrt{s} = 8$  TeV with the ATLAS experiment., **R. E. Ticse Torres**, P. Stolte, 10th International Workshop on Top Quark Physics TOP 2017, Braga, Portugal, 17-22 Sep 2017
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3. Search for squark and gluino production in leptonic final states, **S.-J. Kahn**, 24th International Workshop on Deep Inelastic Scattering and related subjects, Hamburg, Germany, 11-15 Apr 2016
4. Flavour tagging performance optimization for the 2016 LHC Run, **A. Calandri**, Fourth Annual Large Hadron Collider Physics Conference (LHCP2016), Lund, Denmark, 13-18 Jun 2016
5. Flavour tagging algorithms and performance at the ATLAS experiment, **A. Calandri**, 4th Large Hadron Collider Physics Conference, Lund, Sweden, 13-18 Jun 2016

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7. Measurement of cross sections and couplings of the SM Higgs boson in the WW decay channel using the ATLAS detector, **C. Bertella**, 38th International Conference on High Energy Physics, Chicago, United States, 03-10 Aug 2016
8. Recent Results on VBF, VBS, Exclusive WW and Tri-boson Production from ATLAS, **R. Zhang**, QCD@LHC 2016, Zurich, Switzerland, 22-26 Aou 2016
9. Using Integral and Differential Charge Asymmetries for BSM Searches at the LHC, **S. Muanza**, LIO international conference on Composite Models, Electroweak Physics and the LHC, Lyon, France, 5-8 Sep 2016
10. Recent results on Higgs physics from the ATLAS experiment, **A. Calandri**, DISCRETE2016 - Fifth Symposium on Prospects in the Physics of Discrete Symmetries, Warsaw, Poland, 28 Nov 2016 3 Dec 2016
11. Studies on higher QCD corrections in the context of the Higgs boson signal strength extraction at the ATLAS experiment, **A. Calandri**, GDR Terascale@Paris, Paris, France, 23-25 Nov 2016
12. Using integral and differential charge asymmetries in searches for BSM physics at the LHC, **S. Muanza**, International Workshop on Discovery Physics at the LHC (KRUGER2016), Mpumalnga, South Africa, 4-9 Dec 2016
13. Review of Standard Model Higgs results at the ATLAS experiment, **A. Calandri**, 5th Symposium on Prospects in the Physics of Discrete Symmetries, Warsaw, Poland, 28 Nov - 03 Dec 2016
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2. Run 1 ttH  $\rightarrow$  bb, **D. Madaffari**, top LHC- France 2015, Lyon, France, 18-19 Mai 2015
3. Run 2 ttH perspectives, **G. Aad**, top LHC-France 2015, Lyon, France, 18-19 Mai 2015

4. A New Method for Indirect Mass Measurements using the Integral Charge Asymmetry at the LHC, **S. Muanza**, **T. Serre**, DIS 2015 - XXIII. International Workshop on Deep-Inelastic Scattering and Related Subjects, Dallas, Texas, United States, 27 Avr - 1 Mai 2015
5. New Method for Mass Measurements using Integral Charge Asymmetry at LHC, **S. Muanza**, 18th High-Energy Physics International Conference in Quantum Chromodynamics, Montpellier, France, 29 Jun - 03 Jul 2015
6. Recent Results from the ATLAS Experiment, **F. Djama**, 4th International Conference on New Frontiers in Physics ICNFP2015, Kolymbari, Greece, 23-30 Aug 2015
7. Searches for  $t\bar{t}$  resonances with the ATLAS detector at the LHC, **L. Feligioni**, The 23rd International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY), Lake Tahoe, United States, 23 Aug - 29 Aug 2015

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2. Measurements of the production of vector bosons in association with heavy flavour quarks at ATLAS., **G. Aad**, 22nd International Workshop on Deep-Inelastic Scattering and Related Subjects, Warsaw, Poland, 28 Apr - 02 May 2014
3. Searches for third generation squarks with the ATLAS detector, **S. Muanza**, 22nd International Workshop on Deep- Inelastic Scattering and Related Subjects, Warsaw, Poland, 28 Apr - 02 May 2014
4. Searches for electroweak production of supersymmetric gauginos and sleptons with the ATLAS detector, **M. Ughetto**, Phenomenology 2014 Symposium, Pittsburgh, United States, 5-7 May 2014
5. Inclusive searches for squarks and gluinos with the ATLAS detector, **O. Ducu**, Phenomenology 2014 Symposium, Pittsburgh, United States, 5-7 May 2014
6. SUSY Searches : lessons from the first LHC Run, **P. Pralavorio**, 26th Rencontres de Blois on Particle Physics and Cosmology, Blois, France, 18-23 May 2014
7. SM Higgs in Boson Decay Modes in ATLAS, **E. Tiouchichine**, 22nd International Conference on Supersymmetry and Unification of Fundamental Interactions, Univ. Manchester, United Kingdom, 21-26 Jul 2014
8. Review of SUSY searches with the ATLAS detector, **T. Serre**, Prospects for Charged Higgs Discovery at Colliders, Uppsala, Sweden, 16 Sep - 19 Sep 2014
9. Search for the Higgs boson in fermionic channels using the ATLAS detector, **K. Mochizuki**, Workshop on Discovery Physics at the LHC, Kruger Gate, South Africa, 1-6 Dec 2014

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2. The Higgs candidate, experimental status, **F. Hubaut**, The 9th Franco-Italian meeting on B physics, Annecy le Vieux, France, 18-19 Feb 2013
3. Search for strongly produced superpartners in final states with 2 same-sign leptons and jets with the ATLAS detector in  $21 \text{ fb}^{-1}$  pp collisions at  $\sqrt{s} = 8 \text{ TeV}$ , **J. Maurer**, XLVIII th Rencontres de Moriond - Electroweak Interactions and Unified Theories, Paris, France, 2-9 Mar 2013
4. ATLAS studies on Higgs to diboson states, **F. Hubaut**, 48th Rencontres de Moriond on Electroweak Interactions and Unified Theories, La Thuile, Italy, 2-9 Mar 2013
5. Search for the Higgs boson in  $H \rightarrow b\bar{b}$ , **Y. Nagai**, Japan Physical Society Meeting Hiroshima Japan, Hiroshima, Japan, 26-29 Mar 2013
6. Latest ATLAS studies on Higgs to diboson states, **F. Hubaut**, 48th Rencontres de Moriond on Electroweak Interactions and Unified Theories, La Thuile, Italy, 2-9 Mar 2013
7. Top pair production cross-section measurement in full hadronic mode with ATLAS+CMS, **C. Bertella**, LHC France 2013, Annecy, France, 2-6 Apr 2013
8. Searches for the SM BEH boson decaying into a pair of b quarks at the LHC, **N. Tannoury**, LHC France 2013, Annecy, France, 2-6 Apr 2013
9. Search for strongly produced superpartners in final states with same-sign leptons and jets, **J. Maurer**, LHC France 2013, Annecy, France, 2-6 Apr 2013
10. Reducible background estimation for the standard model Higgs boson search analysis in the decay channel  $H \rightarrow ZZ^* \rightarrow 4l$  with the ATLAS experiment, **E. Tiouchichine**, LHC France 2013, Annecy, France, 2-6 Apr 2013
11. SUSY search with two same-sign leptons and jets with the ATLAS detector using  $21 \text{ fb}^{-1}$  of pp collisions at 8 TeV, **O. A. Ducu**, LHC France 2013, Annecy, France, 2-6 Apr 2013
12. Higgs Search in  $b\bar{b}$  Signatures at ATLAS and CMS, **Y. Nagai**, 14th International Conference on B-Physics at Hadron Machines, Bologna, Italy, 8-12 Apr 2013
13. Higgs search with emphasis on  $bar{b}b$  at ATLAS and CMS, **Y. Nagai**, 14th International Conference on B-Physics at Hadron Machines, Bologna, Italy, 8-12 Apr 2013
14. Top quark production in ATLAS, **C. Bertella**, 21st International Workshop on Deep-Inelastic Scattering and Related Subjects, Marseille, France, 22-26 Apr 2013



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16. Search for direct slepton and chargino production in final states with two leptons and missing transverse momentum in pp collisions at  $\sqrt{s} = 8\text{TeV}$  with the ATLAS detector, **T. Serre**, GDR Terascale, Montpellier, France, 13-15 May 2013
17. Particle physics highlights - Higgs Boson: Experimental Status, **Y. Coadou**, OCEVU General Workshop, Toulouse, France, 11-13 Jun 2013
18. Searches for resonances at LHC and Tevatron, **L. Vacavant**, 1st Large Hadron Collider Physics Conference, Barcelona, Spain, 13-18 May 2013
19. Particle Physics and Cosmology, **P. Pralavorio**, 100e Ecole d'Ete de Physique: Post-Planck Cosmology, Les Houches, France, 8 Jul - 2 Aug 2013
20. Operation and performance of the ATLAS liquid argon electromagnetic calorimeters, **J. Maurer**, EPS-HEP 2013 European Physical Society Conference on High Energy Physics, Stockholm, Sweden, 18-24 Jul 2013
21. SUSY status at ATLAS, **P. Pralavorio**, SEARCH'13, Stony Brook, United States, 20-22 Aug 2013
22. Search for a high mass Higgs boson using the ATLAS detector, **S. Diglio**, 2nd International Conference on New Frontiers in Physics, Kolymbari, Greece, 28 Aug - 5 Sep 2013
23. Performance of TOP tagging methods, **M. Talby**, TOP2013 - 6th International Workshop on Top Quark Physics, Durbach, Germany, 14-19 Sep 2013
24. Upgrades of the HL-LHC/ATLAS hybrid pixels detector: Test results of the first 3D-IC prototype, **P. Pangaud**, **D. Arutinov**, **M. Barbero**, **F. Bompard**, **P. Breugnon**, **J. Clemens**, **D. Fougeron**, **M. Garcia-Sciveres**, **S. Godiot**, **T. Hemperek**, **H. Krüger**, **J. Liu**, **T. Obermann**, **A. Rozanov**, **N. Wermes**, 2013 IEEE Nuclear Science Symposium and Medical Imaging Conference, Seoul, South Korea, 27 Oct - 02 Nov 2013
25. Mass Constraint on a SUSY Signal from Global Charge Asymmetry, **S. Muanza**, **T. Serre**, GDR Terascale, Annecy le Vieux, France, 28-30 Oct 2013
26.  $VH \rightarrow bb$ : experimental review, **G. Aad**, GDR Terascale, Annecy le Vieux, France, 28-30 Oct 2013
27. Search for chargino and neutralino production in final states with one lepton two b-jets consistent with a higgs boson and missing transverse momentum with the ATLAS detector in  $20.3 \text{ fb}^{-1}$  of  $\sqrt{s} = 8 \text{ TeV}$  pp collisions, **S. Muanza**, **M. Ughetto**, GDR Terascale, Annecy le Vieux, France, 28-30 Oct 2013
28. Summary of LHC higgs results (ATLAS+CMS), **E. Monnier**, 19th International Symposium on Particles, Strings and Cosmology, Taipei, Taiwan, 20-26 Nov 2013

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1. Introduction of ATLAS cooperation, **E. Monnier**, 5th workshop of the France China Particle Physics Laboratory, FCPPL 2012, Orsay, France, 21-24 Mar 2012
2. DCS Data Viewer, a Application that Access ATLAS DCS Historical Data , C.Tsarouchas, D. Hoffmann , Computing in High Energy and Nuclear Physics (CHEP2012), New-York, United States, 21-25 May 2012
3. Global Charge Asymmetry: a New Method for Indirect Mass Constraints at the LHC, **S. Muanza**, Tools for the SM and the New Physics, Stockholm, Sweden, 2-1 Jun 2012
4. ATLAS Diboson Measurements, **S. Li**, Physics at LHC 2012, Vancouver, Canada, 4-9 Jun 2012
5. 4th generation searches at ATLAS, **L. Felgioni**, 36th International Conference on High Energy Physics, Melbourne, Australia, 4-11 Jul 2012
6. Overview of the ATLAS Insertable B-Layer (IBL) Project, **F. Djama**, iWoRID 2012 - 14th International Workshop on Radiation Imaging Detectors, Figueira Da Foz, Portugal, 1-5 Jul 2012
7. SUSY searches at ATLAS, **P. Pralavorio**, 20th International Conference on Supersymmetry and Unification of Fundamental Interactions, Peking Univ, China, 13-8 Aug 2012
8. Higgs to bbbar and tautau and beyond SM Higgs searches with ATLAS, **Y. Coadou**, LHC days in Split 2012, Split, Croatia, 1-6 Oct 2012
9. The Global Charge Asymmetry: A new Method to Constrain Masses at the LHC, **S. Muanza**, GDR Terascale, Paris, France, 6 Nov 2012
10. Searching for ttH at the LHC, **L. Vacavant**, GDR Terascale, Paris, France, 7 Nov 2012

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2. ATLAS FCPPL project, **E. Monnier**, The 4 th workshop France-China Particle Physics Laboratory (FCPPL2011), Shandong, China, 7-9 Apr 2011
3. The FE-I4 Chip for ATLAS, **M. Menouni** , 8th International Meeting on Front-End Electronics, Bergamo, Italy, 24-27 May 2011
4. FEI4 Chip in Chartered 130 nm, J.- C. Clémens, 8th International Meeting on Front-End Electronics, Bergamo, Italy, 24-27 May 2011
5. Commissioning of high-performance b-tagging algorithms in pp collisions at sqrt(s)=7 TeV with the ATLAS experiment, **N. Bousson**, 2011 Europhysics Conference on High Energy Physics, Grenoble, France, 21-27 Jul 2011

6. ATLAS New Heavy Quark Searches, **N. Bousson**, Physics at LHC 2011, Perugia, Italy, 6-11 Jun 2011
7. Fully hadronic  $t\bar{t}$  cross section measurement with ATLAS detector, **C. Bertella**, Physics in Collision 2011, Vancouver, Canada, 28 Aug - 1 Sep 2011
8. ATLAS Exotic Searches, **N. Bousson**, Hadron Collider Physics Symposium, Paris, France, 14-18 Nov 2011
9. Search for the SM Higgs boson in the decay channel  $H \rightarrow 4l$  with the ATLAS detector, **J. Odier**, Hadron Collider Physics Symposium 2011, Paris, France, 14-18 Nov 2011

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2. ATLAS Calorimeter Results, **E. Monnier**, 45th Rencontres de Moriond on QCD and High Energy Interactions, La Thuile, Italy, 13-20 Mar 2010
3. The ATLAS Liquid Argon calorimeter: Overview and performance, **H. Zhang**, 14th International Conference on Calorimetry in High Energy Physics (CALOR 2010), Beijing, China, 10-14 May 2010
4. Performance of  $E_T^{\text{miss}}$  reconstruction in first ATLAS data, **E. Petit**, 2010 Phenomenology Symposium: LHC Decade!, Madison, United States, 10-12 May 2010
5. Commissioning and operation of the ATLAS pixel detector at the CERN LHC collider, **F. Djama**, 12th International Workshop on Radiation Imaging Detectors, Cambridge, United Kingdom, 11-15 Jul 2010
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7. ATLAS early results, **F. Hubaut**, 4th International Workshop on the Interconnection between Particle Physics and Cosmology, Torino, Italy, 12-16 Jul 2010
8. Performance of the missing transverse energy reconstruction in first ATLAS data at a center-of-mass energy of 7-TeV, **A. Olariu**, 35th International Conference on High Energy Physics: ICHEP 2010, Paris, France, 21-28 Jul 2010
9. Commissioning and performance of the ATLAS calorimeter system with proton collision at LHC, **P. Pralavorio**, 35th International Conference on High Energy Physics: ICHEP 2010, Paris, France, 21-28 Jul 2010
10. Tau trigger and tau reconstruction, efficiency and fake rates in ATLAS, **Y. Coadou**, 3rd International Workshop on Prospects for Charged Higgs Discovery at Colliders (CHARGED 2010), Uppsala, Sweden, 27-30 Sep 2010

11. Status of b-tagging in ATLAS, **C. Lapoire**, Implications of First LHC Data: a joint Berkeley-MIT workshop, MIT, United Kingdom, 10-13 Aug 2010
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2. HV-CMOS simulation and performance on tracking and flavour tagging, **A. Calandri**, **L. Vacavant**, **M. Barbero**, **A. Rozanov**, F. Djama , 8 th International Workshop on Semiconductor Pixel Detectors for Particles and Imaging, Sestri Levante, Italy, 5-9 Sep 2016
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2. ATLAS  $b$ -tagging performance during LHC Run 2 with the Insertable B-layer, **Y. Rodina**, 3rd Annual Large Hadron Collider Physics Conference, St. Petersburg, Russia, 31 Aug - 5 Sep 2015
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2. Real-time flavor tagging selection in ATLAS, **D. Madaffari**, 37th International Conference on High Energy Physics, Valencia, Spain, 2-9 Jul 2014
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2. Search for strongly produced supersymmetric particles in final states with two same-sign leptons and jets with the ATLAS detector using  $21 \text{ fb}^{-1}$  of pp collisions at 8 TeV, **O. A. Ducu**, 2013 European Physical Society Conference on High Energy Physics, Stockholm, Sweden, 18-24 Jul 2013
3. SUSY search with two same-sign leptons and jets with the ATLAS detector using  $21 \text{ fb}^{-1}$  of pp collisions at 8 TeV, **O. Ducu**, 2nd International Conference on New Frontiers in Physics, Kolymbari, Greece, 28 Aug - 5 Sep 2013
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