# Laura Jeanty

# Experimental High Energy Physics

Department of Physics Institute for Fundamental Science University of Oregon, Eugene, OR ⊠ Ijeanty@uoregon.edu

# Research Interests

- o Searches for new physics, particularly in long-lived states
- Measurements of electroweak processes
- o Silicon detector development, data-acquisition, and calibration

# Academic Appointments

- 2017-present Assistant Professor, Department of Physics, University of Oregon, Eugene, OR.
  - 2013–2018 Chamberlain Fellow, Physics Department, Lawrence Berkeley National Lab, Berkeley, CA.
  - 2007–2013 Graduate Research Assistant, Physics Department, Harvard University, Cambridge, MA.
  - 2006-2007 Post-baccalaureate Researcher, Physics Department, Yale University, New Haven, CT.

# Education

- 2007–2013 M.S. & Ph.D., Physics, Harvard University, Cambridge, MA.
  - Dissertation: Measurement of the WZ production cross-section in proton-proton collisions at  $\sqrt{s}{=}$  7
  - TeV and limits on anomalous triple gauge couplings with the ATLAS detector
  - Advisor: Melissa Franklin
- 2002–2006 B.S., Physics, B.A., Geology and Geophysics, Yale University, New Haven, CT.

magna cum laude Advisor: Bonnie Fleming

# ATLAS Experiment Leadership Roles

- 2019-present ITk Pixel Institute Contact
  - 2019–2021 Convener of Supersymmetry Group
  - 2016–2017 Convener of Supersymmetry R-parity Violating and Long-Lived Particles Subgroup
  - 2016–2017 Convener of Task Force on Pixel Run 3 Readiness
  - 2015-2016 Pixel and IBL Calibration Coordinator
  - 2015-2016 Pixel and IBL Data Acquisition Coordinator
    - 2012 Anomalous Triple Gauge Couplings Contact
    - 2011 Muon Data Quality Operations Coordinator

# Honors & Awards

- 2019–2024 US Department of Energy Early Career Award
  - 2016 ATLAS Outstanding Achievement Award for *Outstanding contributions to the successful commissioning and operation of the Pixel Detector for the start-up of Run 2*, CERN
- 2010–2013 National Science Foundation Graduate Research Fellowship

2011	Winner of US LHC User's Organization Young Scientist Competition
	Frederick Sheldon Traveling Fellowship, Harvard University
	Harvard University Certificate of Distinction in Teaching, Harvard University
	White Prize for Excellence in Teaching, Harvard University
	Davenport College Bensinger Science Prize, Yale University
	Teaching & Mentorship
	Teaching
Physics 432	Digital Electronics, Spring 2022
Physics 412	Electricity and Magnetism, Fall 2021 & Fall 2022
Physics 290	Foundation of Physics Laboratory, Winter 2019 & Spring 2020
-	Foundational Physics I, Fall 2018
-	Dissertation Research, 2019 – present
-	Undergraduate Research, 2020 – 2021
,	Postdoc mentoring
	o Ismet Siral, PhD University of Michigan 2019, now CERN Fellow
	PhD Student Supervision
	Nathan Young, 3nd year PhD
	• Kehang Bai, 3nd year PhD
	Marija Glisic, 6th year PhD
	PhD Student Co-Supervision
	Rebecca Carney, PhD 2019 University of Stockholm, now postdoc at LBNL
	o Brad Axen, PhD 2016 University of California, Berkeley, now at Square
	Undergraduate Student Supervision
	o Laura Nosler, UO BS 2022, NSF GFRP winner, now PhD student at UC Berkeley
	o Sorcha O'Connor, UO BS 2022
	o Grey Canada, third year
	Departmental Service
	Committees
2021 procent	
·	Graduate Support Group
	Personnel Committee
	Alumni Committee
	Fall Term Colloquium Organizer
2018-2019	Graduate Studies Committee
2024 2 222	Other Service
	NSF Graduate Fellowship writing workshop for Physics students
2018–2021	Organizer of seminar series for students, Putting Your Physics Degree to Work
	PhD Thesis Committees
	o Current: Nicholas Luongo [chair], Kara Merfeld, Galen Gledhill [chair], Layne Bradshaw, Daniel Hothem, Deion Fellers [chair], Aileen Carroll-Godfrey, Anthony Carroll [chair]

o Complete: Tom Tong, Beth McCarry

# Professional Activities

# **US ATLAS Roles**

- present US ATLAS Management Advisory Committee
- 2019-present US ATLAS Center University Contact and Fellowship Reviewer
  - 2018-2021 Member of US ATLAS Diversity and Inclusion Committee

#### Referee or Reviewer

- 2019 2022 DOE Grant Reviewer
- 2019–2021 Peer Reviewer for Physics Review Letters, Journal of High Energy Physics, and European Physical Journal C

## Conference and Workshop Organization

- 2020-2022 Member of Local Organizing Committee for Snowmass CSS, UW, Seattle, WA
  - 2021 Organizer of ATLAS Joint Search workshop, CERN
  - 2020 Organizer of ATLAS Supersymmetry workshop, CERN
  - 2019 Organizer of US ATLAS ITk Pixel workshop, University of Oregon
  - 2019 Long-lived particle session convener, DM@LHC 2019, University of Washington, Seattle, WA
  - 2019 Supersymmetry session convener, US ATLAS Workshop, UMass Amherst, MA
  - 2018 Organizer of theory-experiment workshop, New ideas in detecting long-lived particles, LBNL
  - 2017 Organizer of ATLAS workshop, Triggering on long-lived particles, LBNL

# Outreach

- 2019-present Speaker, Quarknet workshop for high school teachers, University of Oregon
  - 2021 Co-author of CERN courier article, Higgsinos under the microscope
  - 2021 Writer, UO Comics and Science program, Symmetry in Physics
  - 2020 Speaker, Women in STEM, University of Oregon
  - 2018 Speaker, American Association of Physics Teachers Annual Meeting, University of Oregon
  - 2018 Speaker, Physics Slam, University of Oregon
  - 2018 Session leader, Conference for Undergraduate Women in Physics, University of Oregon
  - 2017 Speaker, Quarknet workshop for high school students, LBNL
  - 2015–2016 Founder and host of In Particular podcast, CERN
    - 2014 ATLAS Control Room virtual guide, CERN
    - 2014 Beamline for schools competition judge, CERN
  - 2012–2013 Founder and host of *Veritalk* podcast, Harvard University
    - 2012 Speaker and Coordinator, Science in the News, Harvard University
    - 2010 Regular contributor, ATLAS Blog, CERN, Geneva, Switzerland
    - 2009 Winner of best outreach poster, Rugby and Particle Physics, SUSSP65, St. Andrews, Scotland

## Selected Talks

- May 2022 How long-lived searches have changed over the years, LLP Workshop, CERN
- Oct 2021 Perspectives from Run 2, LBNL Research Progress Meeting, Berkeley, CA

- May 2021 Future Perspectives at the HL-LHC, Phenomenology 2021 Symposium, Pittsburgh PA
- April 2021 Long live long-lived Supersymmetry, University of Tennessee Colloquium, TN
- March 2021 Long-lived dark photons @ the ILC, International Workshop on Future Linear Colliders
  - May 2020 Physics Through the Looking Glass, public talk @ LHCP, Paris, France
  - Aug 2019 Searching for long-lived supersymmetry with ATLAS, IIT-Madras, Chennai, India
  - June 2019 Long live long-lived Supersymmetry, Oregon State University Colloquium, OR
- March 2019 Expectations for sensitivity to BSM physics at HL-LHC, Aspen 2019 Winter Conference, CO
  - Oct 2018 Heavy charged particles: experimental view, LHC LLP Workshop, Nikhef, The Netherlands
  - Oct 2018 Dark photon searches at the LHC, Dark Interactions 2018, Brookhaven National Lab, NY
  - July 2018 Exotic searches: long-lived signatures, SUSY 2018 Plenary, Barcelona, Spain
- April 2018 Searches for long-lived particles at HL-LHC at ATLAS, HL LHC Meeting, Fermilab, IL
- Feb 2017 Silicon, Straws, and SUSY, University of Oregon Physics Colloquium, Eugene, OR
- Dec 2016 Searching for long-lived sparticles, Northeastern University Physics Colloquium, Boston, MA
- Nov 2016 Searching for long-lived sparticles, Nikhef Colloquium, Amsterdam, The Netherlands
- Aug 2016 Searches for long-lived SUSY particles, ICHEP16, Chicago, IL
- Oct 2014 Operational Experience with the ATLAS Pixel Detector, RESMDD14, Florence, Italy
- Dec 2012 WZ Production at ATLAS, LBNL Research Progress Meeting, Berkeley, CA
- May 2012 ATLAS: neutral and charged TGC measurements, Working Group on Electroweak Precision Measurements at the LHC, CERN, Geneva, Switzerland
- May 2012 Diboson Production and aTGCs from ATLAS, PHENO 2012, University of Pittsburgh, PA
- Nov 2011 ATLAS: Electroweak Physics, US LHC Users Annual Meeting, Argonne National Laboratory, IL
- Oct 2011 Data and MC comparisons for Muon Spectrometer, LPCC Workshop, Geneva, Switzerland
- April 2006 CCpi0 events at MiniBooNE, American Physics Society, APS April Meeting, Dallas, TX

## Selected Publications

# Selected Publications (Refereed)

- [1] <sup>†</sup> The ATLAS Collaboration, "Search for charginos and neutralinos in final states with two boosted hadronically decaying bosons and missing transverse momentum in pp collisions at  $\sqrt{s}=13$  TeV with the ATLAS detector," *Phys. Rev. D*, vol. 104, no. 11, p. 112 010, 2021. DOI: 10.1103/PhysRevD.104.112010. arXiv: 2108.07586 [hep-ex].
- <sup>†</sup> The ATLAS Collaboration, "Search for new phenomena in pp collisions in final states with tau leptons, b-jets, and missing transverse momentum with the ATLAS detector," *Phys. Rev. D*, vol. 104, no. 11, p. 112 005, 2021. DOI: 10.1103/PhysRevD.104.112005. arXiv: 2108.07665 [hep-ex].
- [3] <sup>†</sup> The ATLAS Collaboration, "Search for R-parity-violating supersymmetry in a final state containing leptons and many jets with the ATLAS experiment using  $\sqrt{s}=13TeV$  proton-proton collision data," Eur. Phys. J. C, vol. 81, no. 11, p. 1023, 2021. DOI: 10.1140/epjc/s10052-021-09761-x. arXiv: 2106.09609 [hep-ex].
- [4] <sup>†</sup> The ATLAS Collaboration, "Search for chargino–neutralino pair production in final states with three leptons and missing transverse momentum in  $\sqrt{s}=13$  TeV pp collisions with the ATLAS detector," Eur. Phys. J. C, vol. 81, p. 1118, 2021. DOI: 10.1140/epjc/s10052-021-09749-7. arXiv: 2106.01676 [hep-ex].

- [5] <sup>†</sup> The ATLAS Collaboration, "A search for the decays of stopped long-lived particles at  $\sqrt{s}=13$  TeV with the ATLAS detector," *JHEP*, vol. 07, p. 173, 2021. DOI: 10.1007/JHEP07(2021)173. arXiv: 2104.03050 [hep-ex].
- [6] <sup>†</sup> The ATLAS Collaboration, "Search for supersymmetry in events with four or more charged leptons in  $139\,\mathrm{fb}^{-1}$  of  $\sqrt{s}=13$  TeV pp collisions with the ATLAS detector," *JHEP*, vol. 07, p. 167, 2021. DOI: 10.1007/JHEP07(2021)167. arXiv: 2103.11684 [hep-ex].
- [7] <sup>†</sup> The ATLAS Collaboration, "Search for bottom-squark pair production in pp collision events at  $\sqrt{s}=13$  TeV with hadronically decaying  $\tau$ -leptons, b-jets and missing transverse momentum using the ATLAS detector," *Phys. Rev. D*, vol. 104, no. 3, p. 032014, 2021. DOI: 10.1103/PhysRevD.104.032014. arXiv: 2103.08189 [hep-ex].
- [8] <sup>†</sup> The ATLAS Collaboration, "Search for new phenomena in events with an energetic jet and missing transverse momentum in pp collisions at  $\sqrt{s}$  =13 TeV with the ATLAS detector," *Phys. Rev. D*, vol. 103, no. 11, p. 112 006, 2021. DOI: 10.1103/PhysRevD.103.112006. arXiv: 2102.10874 [hep-ex].
- [9] <sup>†</sup> The ATLAS Collaboration, "Search for new phenomena in events with two opposite-charge leptons, jets and missing transverse momentum in pp collisions at  $\sqrt{s}=13$  TeV with the ATLAS detector," *JHEP*, vol. 04, p. 165, 2021. DOI: 10.1007/JHEP04(2021)165. arXiv: 2102.01444 [hep-ex].
- [10] <sup>†</sup> The ATLAS Collaboration, "Search for new phenomena in final states with b-jets and missing transverse momentum in  $\sqrt{s}=13$  TeV pp collisions with the ATLAS detector," *JHEP*, vol. 05, p. 093, 2021. DOI: 10.1007/JHEP05(2021)093. arXiv: 2101.12527 [hep-ex].
- [11] <sup>†</sup> The ATLAS Collaboration, "Search for squarks and gluinos in final states with one isolated lepton, jets, and missing transverse momentum at  $\sqrt{s}=13$  with the ATLAS detector," *Eur. Phys. J. C*, vol. 81, no. 7, p. 600, 2021, [Erratum: Eur.Phys.J.C 81, 956 (2021)]. DOI: 10.1140/epjc/s10052-021-09748-8. arXiv: 2101.01629 [hep-ex].
- [12] <sup>†</sup> The ATLAS Collaboration, "Search for new phenomena with top quark pairs in final states with one lepton, jets, and missing transverse momentum in pp collisions at  $\sqrt{s}=13$  TeV with the ATLAS detector," *JHEP*, vol. 04, p. 174, 2021. DOI: 10.1007/JHEP04(2021)174. arXiv: 2012.03799 [hep-ex].
- [13] <sup>†</sup> The ATLAS Collaboration, "Search for trilepton resonances from chargino and neutralino pair production in  $\sqrt{s}=13$  TeV pp collisions with the ATLAS detector," *Phys. Rev. D*, vol. 103, no. 11, p. 112 003, 2021. DOI: 10.1103/PhysRevD.103.112003. arXiv: 2011.10543 [hep-ex].
- [14] <sup>†</sup> The ATLAS Collaboration, "Search for Displaced Leptons in  $\sqrt{s}=13$  TeV pp Collisions with the ATLAS Detector," *Phys. Rev. Lett.*, vol. 127, no. 5, p. 051 802, 2021. DOI: 10.1103/PhysRevLett.127.051802. arXiv: 2011.07812 [hep-ex].
- [15] <sup>†</sup> The ATLAS Collaboration, "Search for squarks and gluinos in final states with jets and missing transverse momentum using 139 fb<sup>-1</sup> of  $\sqrt{s}$  =13 TeV pp collision data with the ATLAS detector," *JHEP*, vol. 02, p. 143, 2021. DOI: 10.1007/JHEP02(2021)143. arXiv: 2010.14293 [hep-ex].
- [16] † The ATLAS Collaboration, "Search for phenomena beyond the Standard Model in events with large b-jet multiplicity using the ATLAS detector at the LHC," Eur. Phys. J. C, vol. 81, no. 1, p. 11, 2021, [Erratum: Eur.Phys.J.C 81, 249 (2021)]. DOI: 10.1140/epjc/s10052-020-08730-0. arXiv: 2010.01015 [hep-ex].
- [17] <sup>†</sup> The ATLAS Collaboration, "Search for new phenomena in final states with large jet multiplicities and missing transverse momentum using  $\sqrt{s}=13$  TeV proton-proton collisions recorded by ATLAS in Run 2 of the LHC," *JHEP*, vol. 10, p. 062, 2020. DOI: 10.1007/JHEP10(2020)062. arXiv: 2008.06032 [hep-ex].
- [18] G. Balbi *et al.*, "Measurements of Single Event Upset in ATLAS IBL," *JINST*, vol. 15, no. 06, P06023, 2020. DOI: 10.1088/1748-0221/15/06/P06023. arXiv: 2004.14116 [physics.ins-det].

- [19] <sup>†</sup> The ATLAS Collaboration, "Search for top squarks in events with a Higgs or Z boson using 139 fb<sup>-1</sup> of pp collision data at  $\sqrt{s}=13$  TeV with the ATLAS detector," Eur. Phys. J. C, vol. 80, no. 11, p. 1080, 2020. DOI: 10.1140/epjc/s10052-020-08469-8. arXiv: 2006.05880 [hep-ex].
- [20] <sup>†</sup> The ATLAS Collaboration, "Search for a scalar partner of the top quark in the all-hadronic  $t\bar{t}$  plus missing transverse momentum final state at  $\sqrt{s}=13$  TeV with the ATLAS detector," *Eur. Phys. J. C*, vol. 80, p. 737, 2020. DOI: 10.1140/epjc/s10052-020-8102-8. arXiv: 2004.14060 [hep-ex].
- [21] <sup>†</sup> The ATLAS Collaboration, "Search for direct production of electroweakinos in final states with missing transverse momentum and a Higgs boson decaying into photons in in pp collisions at  $\sqrt{s}=13$  TeV with the ATLAS detector," JHEP, vol. 10, p. 005, 2020. DOI: 10.1007/JHEP10(2020)005. arXiv: 2004.10894 [hep-ex].
- [22] The ATLAS Collaboration, "Search for long-lived, massive particles in events with a displaced vertex and a muon with large impact parameter in pp collisions at  $\sqrt{s}=13$  TeV with the ATLAS detector," *Phys. Rev. D*, vol. 102, p. 032006, 2020. DOI: 10.1103/PhysRevD.102.032006. arXiv: 2003.11956 [hep-ex].
- [23] <sup>†</sup> The ATLAS Collaboration, "Search for chargino-neutralino production with mass splittings near the electroweak scale in three-lepton final states in  $\sqrt{s}=13$  TeV pp collisions with the ATLAS detector," *Phys. Rev. D*, vol. 101, p. 072 001, 2020. DOI: 10.1103/PhysRevD.101.072001. arXiv: 1912.08479 [hep-ex].
- [24] <sup>†</sup> The ATLAS Collaboration, "Searches for electroweak production of supersymmetric particles with compressed mass spectra in  $\sqrt{s}=13$  TeV pp collisions with the ATLAS detector," *Phys. Rev. D*, vol. 101, p. 052 005, 2020. DOI: 10.1103/PhysRevD.101.052005. arXiv: 1911.12606 [hep-ex].
- [25] <sup>†</sup> The ATLAS Collaboration, "Search for direct stau production in events with two hadronic tau-leptons in  $\sqrt{s}=13$  TeV pp collisions with the ATLAS detector," *Phys. Rev. D*, vol. 101, p. 032 009, 2020. DOI: 10.1103/PhysRevD.101.032009. arXiv: 1911.06660 [hep-ex].
- [26]  $^{\circ}$  The ATLAS Collaboration, "Search for long-lived neutral particles produced in in pp collisions at  $\sqrt{s}=13$  TeV decaying into displaced hadronic jets in the ATLAS inner detector and muon spectrometer," *Phys. Rev. D*, vol. 101, p. 052013, 2020. DOI: 10.1103/PhysRevD.101.052013. arXiv: 1911.12575 [hep-ex].
- [27] The ATLAS Collaboration, "Search for magnetic monopoles and stable high-electric-charge objects in 13 tev proton-proton collisions with the atlas detector," *Phys. Rev. Lett.*, vol. 124, p. 031802, 3 Jan. 2020. DOI: 10.1103/PhysRevLett.124.031802. [Online]. Available: https://link.aps.org/doi/10.1103/PhysRevLett.124.031802.
- [28] The ATLAS Collaboration, "Search for heavy charged long-lived particles in proton-proton collisions at  $\sqrt{s}=13$  TeV using an ionisation measurement with the ATLAS detector," *Phys. Lett.*, vol. B788, pp. 96–116, 2019. DOI: 10.1016/j.physletb.2018.10.055. arXiv: 1808.04095 [hep-ex].
- [29] Y. Chen, E. Frangipane, M. Garcia-Sciveres, L. Jeanty, B. Nachman, S. Pagan Griso, and F. Wang, "Optimal use of Charge Information for the HL-LHC Pixel Detector Readout," *Nucl. Instrum. Meth.*, vol. A902, pp. 197–210, 2018. DOI: 10.1016/j.nima.2018.01.091. arXiv: 1710.02582 [physics.ins-det].
- [30] <sup>†</sup> The ATLAS Collaboration, "Search for R-parity-violating supersymmetric particles in multi-jet final states produced in p-p collisions at  $\sqrt{s}=13$  TeV using the ATLAS detector at the LHC," *Phys. Lett.*, vol. B785, pp. 136–158, 2018. DOI: 10.1016/j.physletb.2018.08.021. arXiv: 1804.03568 [hep-ex].
- [31] <sup>†</sup> The ATLAS Collaboration, "A search for pair-produced resonances in four-jet final states at  $\sqrt{s}=13$  TeV with the ATLAS detector," *Eur. Phys. J.*, vol. C78, no. 3, p. 250, 2018. DOI: 10.1140/epjc/s10052-018-5693-4. arXiv: 1710.07171 [hep-ex].
- [32] <sup>†</sup> The ATLAS Collaboration, "Search for B-L R-parity-violating top squarks in  $\sqrt{s}=13$  TeV pp collisions with the ATLAS experiment," *Phys. Rev.*, vol. D97, no. 3, p. 032003, 2018. DOI: 10.1103/PhysRevD. 97.032003. arXiv: 1710.05544 [hep-ex].

- [33] The ATLAS IBL collaboration, "Production and Integration of the ATLAS Insertable B-Layer," JINST, vol. 13, no. 05, T05008, 2018. DOI: 10.1088/1748-0221/13/05/T05008. arXiv: 1803.00844 [physics.ins-det].
- [34] The ATLAS Collaboration, "Search for long-lived charginos based on a disappearing-track signature in pp collisions at  $\sqrt{s}=13$  TeV with the ATLAS detector," *JHEP*, vol. 06, p. 022, 2018. DOI: 10.1007/JHEP06(2018)022. arXiv: 1712.02118 [hep-ex].
- [35] <sup>†</sup> The ATLAS Collaboration, "Search for long-lived, massive particles in events with displaced vertices and missing transverse momentum in  $\sqrt{s}=13$  TeV pp collisions with the ATLAS detector," *Phys. Rev.*, vol. D97, no. 5, p. 052012, 2018. DOI: 10.1103/PhysRevD.97.052012. arXiv: 1710.04901 [hep-ex].
- [36] <sup>†</sup> The ATLAS Collaboration, "Search for new phenomena in a lepton plus high jet multiplicity final state with the ATLAS experiment using  $\sqrt{s}=13$  TeV proton-proton collision data," *JHEP*, vol. 09, p. 088, 2017. DOI: 10.1007/JHEP09(2017)088. arXiv: 1704.08493 [hep-ex].
- [37] The ATLAS Collaboration, "Search for metastable heavy charged particles with large ionization energy loss in pp collisions at  $\sqrt{s}=13$  TeV using the ATLAS experiment," *Phys. Rev.*, vol. D93, no. 11, p. 112015, 2016. DOI: 10.1103/PhysRevD.93.112015. arXiv: 1604.04520 [hep-ex].
- [38]  $^{\circ}$  The ATLAS Collaboration, "Study of (W/Z)H production and Higgs boson couplings using  $H \to WW^*$  decays with the ATLAS detector," *JHEP*, vol. 08, p. 137, 2015. DOI: 10.1007/JHEP08(2015)137. arXiv: 1506.06641 [hep-ex].
- [39] The ATLAS Collaboration, "Measurement of WZ production in proton-proton collisions at  $\sqrt{s}=7$  TeV with the ATLAS detector," Eur. Phys. J., vol. C72, p. 2173, 2012. DOI: 10.1140/epjc/s10052-012-2173-0. arXiv: 1208.1390 [hep-ex].
- [40] The ATLAS Collaboration, "Measurement of the  $W^\pm Z$  production cross section and limits on anomalous triple gauge couplings in proton-proton collisions at  $\sqrt{s}=7$  TeV with the ATLAS detector," *Phys. Lett.*, vol. B709, pp. 341–357, 2012. DOI: 10.1016/j.physletb.2012.02.053. arXiv: 1111.5570 [hep-ex].
- [41] The ATLAS Collaboration, "Measurement of the Transverse Momentum Distribution of W Bosons in pp Collisions at  $\sqrt{s}=7$  TeV with the ATLAS Detector," *Phys. Rev.*, vol. D85, p. 012005, 2012. DOI: 10.1103/PhysRevD.85.012005. arXiv: 1108.6308 [hep-ex].
- [42] The ATLAS Collaboration, "Measurement of the  $W \to \ell \nu$  and  $Z/\gamma^* \to \ell \ell$  production cross sections in proton-proton collisions at  $\sqrt{s}=7$  TeV with the ATLAS detector," *JHEP*, vol. 12, p. 060, 2010. DOI: 10.1007/JHEP12(2010)060. arXiv: 1010.2130 [hep-ex].
- [43] The ATLAS TRT Collaboration, "The ATLAS Transition Radiation Tracker (TRT) proportional drift tube: design and performance," *Journal of Instrumentation*, vol. 3, no. 02, P02013, 2008. [Online]. Available: http://stacks.iop.org/1748-0221/3/i=02/a=P02013.

# Selected Publications (Non-Refereed)

- [1] L. Jeanty, L. Nosler, and C. Potter, "Sensitivity to decays of long-lived dark photons at the ILC (A Snowmass White Paper)," 2022. DOI: 10.48550/ARXIV.2203.08347. [Online]. Available: https://arxiv.org/abs/2203.08347.
- [2] X. Cid Vidal *et al.*, "Beyond the Standard Model Physics at the HL-LHC and HE-LHC," 2018. arXiv: 1812.07831 [hep-ph].
- [3] The ATLAS Collaboration, "Sensitivity of the ATLAS experiment to long-lived particles with a displaced vertex and  $E_T^{miss}$  signature at the HL-LHC," no. ATL-PHYS-PUB-2018-033, Nov. 2018. [Online]. Available: http://cds.cern.ch/record/2647992.

 $<sup>^{\</sup>dagger}$  indicates group or subgroup convener,  $^{\circ}$  internal reviewer, no mark indicates direct contributing or leading author

[4] The ATLAS Collaboration, "Technical Design Report for the ATLAS Inner Tracker Pixel Detector," no. CERN-LHCC-2017-021. ATLAS-TDR-030, Sep. 2017. [Online]. Available: http://cds.cern.ch/record/2285585.

# Works in Progress

[1] The ATLAS Collaboration, "Search for heavy, long-lived, charged particles with large ionisation energy loss in pp collisions at  $\sqrt{s}=13$  TeV using the ATLAS experiment and the full Run 2 dataset," CERN-EP-2022-029, 2022. [Online]. Available: https://atlas.web.cern.ch/Atlas/GROUPS/PHYSICS/PAPERS/SUSY-2018-42/.