

Curriculum Vitae
Andrew W. Askew
Florida State University
askew@hep.fsu.edu

Employment History:

Aug. 2015 – Present	Associate Professor, Florida State University
Aug. 2009 – Aug. 2015	Assistant Professor, Florida State University
Sept. 2008 – Aug. 2009	Postdoctoral Fellow, Rutgers University
Jan. 2005 – Sept. 2008	Postdoctoral Fellow, Florida State University

Academic Training:

2004 Ph. D Physics, Rice University, Advisor: Prof. B. Paul Padley
2001 M. S. Physics, Rice University, Advisor: Prof. B. Paul Padley
1999 B. S. Physics, University of Houston, Advisor: Prof. Kwong Lau

Collaborations: CMS (2005-Present), D0 (2000-present)

Fermilab-based Activities:

- LPC Management Board member (2019--Present)
- LEGO Particle Flow HATS @ LPC (2018)
- LPC G&V Committee member (2016-2018)
- 2013 Fermilab LHC Physics Center Distinguished Researcher (senior).
- Organizer LPC Physics Forum (2013-2016)
- Photon HATS @ LPC (2013)
- CMS Data Analysis School Photon Organizer (2010-2015)
- LPC Photon group leader (2009)
- D0 Electroweak Physics Group convenor (2006)

Other Research Activities:

- CMS SUSY Trigger Subgroup convenor (2017-2019)
- CMS SUSY Photons Subgroup convenor (2015-2017)
- CMS MET Scanners group leader (2015)
- CMS ECAL Editorial board (2014-present)
- CMS FSU Deputy Team Leader (2014-present)

Selected Primary Authorship Publications (CMS):

Signing all papers on CMS Experiment since 2006.

A. Sirunyan et al. [CMS Collaboration], "Search for new physics in final states with a single photon and missing transverse momentum in proton-proton collisions at $\sqrt{s}=13$ TeV", **JHEP** **1902** (2019) 074.

A. Sirunyan et al. [CMS Collaboration], "Search for new physics in the monophoton final state in proton-proton collisions at $\sqrt{s}=13$ TeV", **JHEP** **1710** (2017) 073.

V. Khachatryan et al. [CMS Collaboration], "Search for supersymmetry in events with photons and missing transverse energy in pp collisions at 13 TeV", **Phys. Lett. B** **769**, 391 (2017).

V. Khachatryan *et al.* [CMS Collaboration], "Measurement of the $Z\gamma\rightarrow\nu\nu\gamma$ production cross section in pp collisions at $\sqrt{s}=8$ TeV and limits on anomalous $ZZ\gamma$ and $Z\gamma\gamma$ trilinear gauge boson couplings," **Phys. Lett. B** **760**, 448 (2016).

V. Khachatryan *et al.* [CMS Collaboration], "Search for new phenomena in monophoton final state in proton-proton final states at $\sqrt{s}=8$ TeV," **Phys. Lett. B** **755**, 102 (2016).

A. Askew *et al.*, "Prospect for measuring the CP phase in the $h\tau\tau$ coupling at the LHC," **Phys. Rev. D** **91**(7), 075014 (2015).

V. Khachatryan *et al.* [CMS Collaboration], "Search for stealth supersymmetry in events with jets, either photons or leptons, and low missing transverse momentum in pp collisions at 8 TeV," **Phys. Lett. B** **743**, 503 (2015).

A. Askew et al. "Searching for Dark Matter at Hadron Colliders," *Int. J. Mod. Phys. A* **29**:1430041, 2014.

S. Chatrchyan *et al.* [CMS Collaboration], "Measurement of the production cross section for $Z\gamma\rightarrow\nu\nu\gamma$ in pp collisions at $\sqrt{s}=7$ TeV and limits on $ZZ\gamma$ and $Z\gamma\gamma$ triple gauge boson couplings," **JHEP** **1310**, 164 (2013).

S. Chatrchyan *et al.* [CMS Collaboration], "Search for new physics in events with photons, jets, and missing transverse energy in pp collisions at $\sqrt{s}=7$ TeV," **JHEP** **1303**, 111 (2013).

S. Chatrchyan *et al.* [CMS Collaboration], "Search for supersymmetry in events with photons and low missing transverse energy in pp collisions at $\sqrt{s}=7$ TeV," **Phys. Lett. B** **719**, 42 (2013).

S. Chatrchyan *et al.* [CMS Collaboration] "Search for Dark Matter and Large Extra Dimensions in pp Collisions Yielding a Photon and Missing Transverse Energy", **Phys. Rev. Lett.** **108**, 261803 (2012).

S. Chatrchyan *et al.* [CMS Collaboration] "Search for Supersymmetry in pp Collisions at $\sqrt{s}=7$ TeV in Events with Two Photons and Missing Transverse Energy", **Phys. Rev. Lett.** **106**, 218001 (2011).

Selected Primary Authorship Publications (D0):

Signing all papers on D0 Experiment since 2002.

V. M. Abazov *et al.* [D0 Collaboration], "Measurement of the muon charge asymmetry in $p\bar{p} \rightarrow W + X \rightarrow \mu\nu + X$ events at $\sqrt{s} = 1.96$ TeV," **Phys. Rev. D** **88**, 091102 (2013).

V. M. Abazov *et al.* [D0 Collaboration], "Search for resonant WW and WZ production in $p\bar{p}$ collisions at $\sqrt{s}=1.96$ TeV," **Phys. Rev. Lett.** **107**, 011801 (2011).

V. M. Abazov *et al.* [D0 Collaboration], "Search for Flavor Changing Neutral Currents in Decays of Top Quarks," **Phys. Lett. B** **701**, 313 (2011).

V. M. Abazov *et al.* [D0 Collaboration] "Measurement of the $WZ \rightarrow l\nu ll$ Cross Section and Limits on Anomalous Triple Gauge Couplings in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV", **Phys. Lett. B** **695**, 67 (2011).

V. M. Abazov *et al.* [D0 Collaboration] "Search for a Resonance Decaying into WZ Boson Pairs in $p\bar{p}$ Collisions", **Phys. Rev. Lett.** **104**, 061801 (2010)

V. M. Abazov *et al.* [D0 Collaboration], "Measurement of the electron charge asymmetry in $p\bar{p} \rightarrow W+X \rightarrow e\nu+X$ events at $\sqrt{s} = 1.96$ TeV", **Phys. Rev. Lett.** **101**, 211801 (2008).

V. M. Abazov *et al.* [D0 Collaboration], "First study of the radiation-amplitude zero in $W\gamma$ production and limits on anomalous $WW\gamma$ couplings at $\sqrt{s} = 1.96$ TeV", **Phys. Rev. Lett.** **100**, 24105 (2008).

V. M. Abazov *et al.* [D0 Collaboration], "Measurement of the $p\bar{p} \rightarrow WZ+X$ Cross Section at $\sqrt{s} = 1.96$ TeV and Limits on WWZ Trilinear Gauge Couplings", **Phys. Rev. D** **76**, 111104 (2007).

V. M. Abazov *et al.* [D0 Collaboration], "Measurement of the $p\bar{p} \rightarrow W\gamma + X$ cross section at $\sqrt{s} = 1.96$ TeV and $WW\gamma$ anomalous coupling limits," **Phys. Rev. D** **71**, 091108 (2005).

V. M. Abazov *et al.* [D0 Collaboration], "Study of $Z\gamma$ events and limits on anomalous $ZZ\gamma$ and $Z\gamma\gamma$ couplings in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ -TeV," **Phys. Rev. Lett.** **95**, 051802 (2005).

Conference Talks:

“Search for SUSY at LHC with CMS”, Presented at **Lake Louise 2018**: Lake Louise Winter Institute 2018, 18-24 Feb 2018, University of Alberta, Alberta, Canada.

“SUSY Searches at CMS”, Presented at **SUSY2016**: 24th International Conference on Supersymmetry and Unification of Fundamental Interactions, 3-8 Jul 2016, Melbourne, Australia.

“Direct Photon Production at the LHC”, Presented at **Blois 2013**: Rencontres de Blois on "Particle Physics and Cosmology", Blois, France, May 28, 2013. On behalf of the ATLAS and CMS experiments.

“Searches for Supersymmetry with the CMS detector at the LHC”, Presented at **Kruger 2012**, Kruger, South Africa, Dec. 7, 2012. On behalf of the CMS experiment.

“Electroweak and Hints of New Phenomena at the Tevatron”, Presented at **Physics at the LHC**, Vancouver, Canada, June 8th, 2012. On behalf of the D0 and CDF experiments.

“Recent results on BSM searches at CMS”, Presented at the **Fermilab Joint Experimental-Theoretical Physics Seminar**, Batavia, United States, Jul. 29th, 2011. On behalf of the CMS Collaboration.

“Beyond the Standard Model Searches at the Tevatron”, Presented at **Aspen Winter Conference 2011**, Aspen, United States, Feb. 12-18, 2011. On behalf of the D0 and CDF experiments.

“Hadron Physics at the LHC”, Presented at **Hadron 2009**, Tallahassee, United States, Nov. 29- Dec. 4, 2009. On behalf of the CMS, ATLAS and LHCb experiments.

“Status of the CMS Experiment”, presented at the **76th annual meeting of the Southeastern Section of the American Physical Society (SESAPS)**, Atlanta, United States, Nov. 13, 2009.

“Recent Electroweak Measurements at the Tevatron”, Presented at the **14th Lomonosov Conference on Elementary Particle Physics**, Moscow, Russia, August 19-25, 2009. On behalf of the D0 and CDF experiments.

“Searches for Exotica in CMS”, Presented at the **Brookhaven Forum 2008 Terra Incognita: From LHC to Cosmology**, Upton, United States, November 6-8, 2008. On behalf of the CMS Collaboration.

“Recent D0 Results”, Presented at the **Fermilab Joint Experimental-Theoretical Physics Seminar**, as a part of the 2008 Hadron Collider Physics Summer School, Batavia, United States, August 15, 2008. On behalf of the D0 Collaboration.

“Alternative New Physics at the LHC”, presented at “Anticipating New Physics at the LHC”, a conference hosted by the Kavli Institute for Theoretical Physics at the **University of California-Santa Barbara**, June 2-6, 2008. On behalf of the CMS and ATLAS collaborations.

“Electroweak Measurements (including Dibosons) at the Tevatron”, presented at the **XXIst Rencontres de Physique de la Valle d'Aoste**, La Thuile, Italy, Feb. 24-Mar. 1, 2008. On behalf of the D0 and CDF Collaborations.

“Electroweak Cross Sections, Asymmetries, and Diboson Results from the Tevatron”, presented at **HCP2007**, Elba, Italy, May 20-25, 2007. On behalf of the D0 and CDF Collaborations.

“Recent Diboson and Electroweak Results from Dzero”, Presented at the **Fermilab Joint Experimental-Theoretical Physics Seminar**, Batavia, United States, June 23, 2006. On behalf of the D0 Collaboration.

“Diboson Cross Sections at $\sqrt{s} = 1.96$ TeV”, Presented at the **XXXXth Rencontres de Moriond** on QCD and High Energy Hadronic Interactions, La Thuile, Italy, Mar. 12-19, 2005. On behalf of the D0 and CDF Collaborations.

Seminars/Colloquia:

“Seeing the Light: Physics with Photons at the LHC”, a colloquia given for the Florida State University physics department, February 20th, 2014.

“Searches for New Physics with the CMS Experiment at the LHC”, a seminar given at the FSU/FAMU College of Engineering, Dec. 2nd, 2011.

“Let there be Light: Photons and the CMS Experiment”, a seminar given at Rice University, Dec. 2, 2010.

“Electroweak Physics at D0: Stories the W can tell...”, a colloquium given at Florida State University, Jan. 26, 2009.

“Electroweak Symmetry Breaking, Bosons, and Di-bosons”, a seminar given at the California Institute of Technology, April 8, 2008.

“Life, the Universe, and Electroweak Symmetry Breaking,” a colloquium given at the University of Virginia, February 8, 2008.

“New Diboson Results from Dzero”, a seminar given at Northwestern University, Jan. 31, 2005.