

Curriculum Vitae

Education

- 1992–1998: University of Wisconsin, Madison, Wisconsin
Doctor of Philosophy in Physics
- 1988–1992: Bates College, Lewiston, Maine
Bachelor of Science, *cum laude*, in Physics and Mathematics
Elected to Phi Beta Kappa and Sigma Xi

Professional Experience

- 2022–present: Associate Chair of Physics for Graduate Studies,
University of Colorado, Boulder, Colorado
- 2019–present: Professor of Physics,
University of Colorado, Boulder, Colorado
- 2014–2018: Associate Chair of Physics for Graduate Studies,
University of Colorado, Boulder, Colorado
- 2012–2019: Associate Professor of Physics,
University of Colorado, Boulder, Colorado
- 2005–2012: Assistant Professor of Physics,
University of Colorado, Boulder, Colorado
- 2003–2005: Research Associate,
University of Colorado, Boulder, Colorado
- 2000–2002: Research Assistant Professor,
Vanderbilt University, Nashville, Tennessee
- 1998–2000: Research Associate,
Vanderbilt University, Nashville, Tennessee
- 1995–1998: Research Assistant
University of Wisconsin, Madison, Wisconsin
- 1992–1995: Teaching Assistant
University of Wisconsin, Madison, Wisconsin

Professional Activities

- 2022–present: Co-chair of CMS b -physics and top physics Publications Committee
- 2020–present: Level 3 manager of USCMS Trigger Correlator Phase 2 upgrade project
- 2018–2020: U.S. CMS Computing Liaison
- 2015: Reviewed 5 DOE Early Career proposals
- 2015: Member of the U.S. CMS Tier-2 Computing Facilities Budget Reduction Committee
- 2014: Member of the U.S. CMS Analysis Computing Review Committee
- 2013–2022: Member of CMS Publications Committee
- 2013–2014: CMS Upgrade Tracking Coordinator
- 2013: Co-organizer of Joint CPAD Snowmass Instrumentation Frontier meeting
- 2012–present: Reviewer for Physics Letters B

2012–2013: Member of U.S. CMS Tier 2 Computing Review Committee
 2012: Primary organizer of U.S. CMS meeting
 2011–present: Reviewer for Physical Review Letters
 2011–present: Reviewer of DOE SBIR proposals
 2011–2012: Co-convener of CMS Tracking Physics Object Group
 2011: Lecturer at CERN/Fermilab Hadronic Collider Physics Summer School
 2005–2019: Member of CMS Tracker Institutional Board

Postdoctoral associates

2024–present: Claire Savard
 2023–present: Jannicke Pearkes (co-advisor with Ulmer)
 2023–2024: Nick Manganelli (co-advisor with Ulmer)
 2018–2022: Alexx Perloff (co-advisor with Ulmer)
 2015–2018: Stefanos Leontsinis (Senior Researcher, University of Zurich) (co-advisor with Cumalat)
 2008–2014: Keith Ulmer (Associate Professor, University of Colorado Boulder)
 2006–2011: Mauro Dinardo (Associate Professor, Università degli Studi di Milano–Bicocca)

Graduate students

2024–present: Max Hermann
 2024–present: Jared Fraticelli
 2018–2024: Claire Savard (Ph.D.):
 2013–2018: Frank Jensen (Ph.D.): Postdoctoral associate at University of California–Davis
 2011–2017: Troy Mulholland (Ph.D.): Data scientist with Chicago Cubs
 2006–2012: Brian Drell (M.S.): Software engineer at Apple
 2005–2007: Maximilien Bunce (M.S.): IMG mountain guide

Undergraduate students

2024–present: Sam Schwartzberg
 2024–present: Joseph Pontiff
 2023–present: Owen Grimes
 2019–2021: Omar Alterkait (honors thesis)
 2019–2021: Cheng Jiang (honors thesis)
 2019–2020: John Julich
 2019–2020: Yuri Han
 2019–2020: Aaron Mankel
 2015–2016: Tristan Rendfrey
 2011: Kevin Wheeler
 2006–2007: Becky Tucker (REU student)

Courses Taught

Spring 2025: PHYS 2600: Scientific Computing (36 students)
 Spring 2024: PHYS 2600: Scientific Computing (44 students)
 Fall 2023: PHYS 1110: General Physics 1 (1109 students, 13 TAs, 13 LAs)
 (backup with West and Holland)

Spring 2023: PHYS 2600: Scientific Computing (35 students)
 Fall 2022: PHYS 2130: Introduction to Quantum Mechanics (37 students)
 Spring 2022: PHYS 2010: General Physics 1 (154 students)
 (lead with Hodby)
 Fall 2021: PHYS 3330: Electronics for the Physical Sciences (72 students)
 (with Cao, Clark, Lee)
 Spring 2021: PHYS 3330: Electronics for the Physical Sciences (64 students)
 (with Cao, Clark, Regal)
 Fall 2020: PHYS 3330: Electronics for the Physical Sciences (60 students)
 (with Cao, Clark, Cumalat, Reznik)
 Spring 2020: PHYS 2010: General Physics 1 (175 students) (backup for Horanyi)
 Spring 2018: PHYS 4430: Advanced Laboratory (18 students) (with Ye)
 Spring 2017: PHYS 2020: General Physics 2 (283 students) (backup for Beale)
 Fall 2016: PHYS 4430: Advanced Laboratory (7 students)
 Spring 2016: PHYS 4430: Advanced Laboratory (19 students) (with Hough)
 Spring 2015: PHYS 1110: General Physics I (768 students) (lead with Kinney)
 Fall 2014: PHYS 3330: Electronics for the Physical Sciences (45 students)
 (with Finkelstein and Lewandowski)
 Spring 2014: PHYS 2150: Experimental Modern Physics (74 students)
 Fall 2013: PHYS 3330: Electronics for the Physical Sciences (54 students)
 (with Lewandowski, McElroy, Price, Reznik)
 Spring 2012: PHYS 2010: General Physics 1 (249 students) (backup for Franklin)
 Fall 2011: PHYS 7730: Theory of Elementary Particles (13 students)
 Spring 2011: PHYS 4430: Advanced Laboratory (27 students) (with Rogers)
 Fall 2010: PHYS 2010: General Physics 1 (413 students) (backup for Dubson)
 Spring 2010: PHYS 4430: Advanced Laboratory (26 students) (with Rogers)
 Fall 2009: PHYS 3330: Electronics for the Physical Sciences (53 students)
 (with Lewandowski and Thompson)
 Spring 2009: PHYS 2170: Foundations of Modern Physics (43 students)
 Fall 2008: PHYS 1110: General Physics I (644 students) (lead with K. Perkins)
 Spring 2008: PHYS 1110: General Physics I (623 students) (lead with K. Dessau)
 Spring 2007: PHYS 3220: Quantum Mechanics 1 (44 students)
 Fall 2006: PHYS 2020: General Physics 2 (179 students) (backup for Nagle)
 Spring 2006: PHYS 2150: Experimental Modern Physics (45 students)
 Fall 2005: PHYS 2150: Experimental Modern Physics (53 students)

Peer-Reviewed Publications

A full list of peer reviewed publications (currently 1444) is available at [Inspirehep.net/search?p=find+a+stenson+and+tc+p+and+not+tc+c](https://inspirehep.net/search?p=find+a+stenson+and+tc+p+and+not+tc+c). Below are the publications for which I played a significant role. The first section lists the publications for which I was the author or contributed to the analysis. The second section lists the publications for which I was one of the internal reviewers.

Author and/or analyzer

21. *Optimizing High-Throughput Inference on Graph Neural Networks at Shared Computing Facilities with the NVIDIA Triton Inference Server*, C. Savard, N. Manganelli, B. Holzman,

- L. Gray, A. Perloff, K. Pedro, K. Stenson, and K. Ulmer, *Comput Softw Big Sci* **8**, 14 (2024) [doi:10.1007/s41781-024-00123-2](https://doi.org/10.1007/s41781-024-00123-2)
20. *Search for dark QCD with emerging jets in proton-proton collisions at $\sqrt{s} = 13$ TeV*, A. Hayrapetyan *et al.* [CMS Collaboration], *JHEP* **2407**, 142 (2024) [doi:10.1007/JHEP07\(2024\)142](https://doi.org/10.1007/JHEP07(2024)142) [arXiv:2403.01556](https://arxiv.org/abs/2403.01556)
 19. *Search for higgsinos decaying to two Higgs bosons and missing transverse momentum in proton-proton collisions at $\sqrt{s} = 13$ TeV*, A. Tumasyan *et al.* [CMS Collaboration], *JHEP* **2205**, 014 (2022) [doi:10.1007/JHEP05\(2022\)014](https://doi.org/10.1007/JHEP05(2022)014) [arXiv:2201.04206](https://arxiv.org/abs/2201.04206)
 18. *Search for supersymmetry in proton-proton collisions at 13 TeV in final states with jets and missing transverse momentum*, A. M. Sirunyan *et al.* [CMS Collaboration], *JHEP* **1910**, 244 (2019) [doi:10.1007/JHEP10\(2019\)244](https://doi.org/10.1007/JHEP10(2019)244) [arXiv:1908.04722](https://arxiv.org/abs/1908.04722)
 17. *Search for Physics Beyond the Standard Model in Events with High-Momentum Higgs Bosons and Missing Transverse Momentum in Proton-Proton Collisions at 13 TeV*, A. M. Sirunyan *et al.* [CMS Collaboration], *Phys. Rev. Lett.* **120**, 241801 (2018). [doi:10.1103/PhysRevLett.120.241801](https://doi.org/10.1103/PhysRevLett.120.241801) [arXiv:1712.08501](https://arxiv.org/abs/1712.08501)
 16. *Search for supersymmetry in multijet events with missing transverse momentum in proton-proton collisions at 13 TeV*, A. M. Sirunyan *et al.* [CMS Collaboration], *Phys. Rev. D* **96**, 032003 (2017) [doi:10.1103/PhysRevD.96.032003](https://doi.org/10.1103/PhysRevD.96.032003) [arXiv:1704.07781](https://arxiv.org/abs/1704.07781)
 15. *Search for supersymmetry in the multijet and missing transverse momentum final state in pp collisions at 13 TeV*, V. Khachatryan *et al.* [CMS Collaboration], *Phys. Lett. B* **758**, 152 (2016) [doi:10.1016/j.physletb.2016.05.002](https://doi.org/10.1016/j.physletb.2016.05.002) [arXiv:1602.06581](https://arxiv.org/abs/1602.06581)
 14. *Angular analysis of the decay $B^0 \rightarrow K^{*0} \mu^+ \mu^-$ from pp collisions at $\sqrt{s} = 8$ TeV*, V. Khachatryan *et al.* [CMS Collaboration], *Phys. Lett. B* **753**, 424 (2016) [doi:10.1016/j.physletb.2015.12.020](https://doi.org/10.1016/j.physletb.2015.12.020) [arXiv:1507.08126](https://arxiv.org/abs/1507.08126)
 13. *Description and performance of track and primary-vertex reconstruction with the CMS tracker*, S. Chatrchyan *et al.* [CMS Collaboration], *JINST* **9**, P10009 (2014) [doi:10.1088/1748-0221/9/10/P10009](https://doi.org/10.1088/1748-0221/9/10/P10009) [arXiv:1405.6569](https://arxiv.org/abs/1405.6569)
 12. *Angular analysis and branching fraction measurement of the decay $B^0 \rightarrow K^{*0} \mu^+ \mu^-$* , S. Chatrchyan *et al.* [CMS Collaboration], *Phys. Lett. B* **727**, 77 (2013) [doi:10.1016/j.physletb.2013.10.017](https://doi.org/10.1016/j.physletb.2013.10.017) [arXiv:1308.3409](https://arxiv.org/abs/1308.3409)
 11. *Measurement of the Λ_b cross section and the $\bar{\Lambda}_b$ to Λ_b ratio with Λ_b to $J/\psi \Lambda$ decays in pp collisions at $\sqrt{s} = 7$ TeV*, S. Chatrchyan *et al.* [CMS Collaboration], *Phys. Lett. B* **714**, 136 (2012) [doi:10.1016/j.physletb.2012.05.063](https://doi.org/10.1016/j.physletb.2012.05.063) [arXiv:1205.0594](https://arxiv.org/abs/1205.0594)
 10. *Measurement of the B^0 production cross section in pp Collisions at $\sqrt{s} = 7$ TeV*, S. Chatrchyan *et al.* [CMS Collaboration], *Phys. Rev. Lett.* **106**, 252001 (2011) [doi:10.1103/PhysRevLett.106.252001](https://doi.org/10.1103/PhysRevLett.106.252001) [arXiv:1104.2892](https://arxiv.org/abs/1104.2892)
 9. *Strange Particle Production in pp Collisions at $\sqrt{s} = 0.9$ and 7 TeV*, V. Khachatryan *et al.* [CMS Collaboration], *JHEP* **1105**, 064 (2011) [doi:10.1007/JHEP05\(2011\)064](https://doi.org/10.1007/JHEP05(2011)064) [arXiv:1102.4282](https://arxiv.org/abs/1102.4282)
 8. *CMS Tracking Performance Results from early LHC Operation*, V. Khachatryan *et al.* [CMS Collaboration], *Eur. Phys. J. C* **70**, 1165 (2010) [doi:10.1140/epjc/s10052-010-1491-3](https://doi.org/10.1140/epjc/s10052-010-1491-3) [arXiv:1007.1988](https://arxiv.org/abs/1007.1988)

7. *Study of Cabibbo Suppressed Decays of the D_s^+ Charmed-Strange Meson involving a K_S^0* , J. M. Link *et al.* [FOCUS Collaboration], Phys. Lett. B **660**, 147 (2008) [doi:10.1016/j.physletb.2007.12.050](https://doi.org/10.1016/j.physletb.2007.12.050) [arXiv:0708.1029](https://arxiv.org/abs/hep-ex/0708.1029)
6. *Search for a pentaquark decaying to pK_S^0* , J. M. Link *et al.* [FOCUS Collaboration], Phys. Lett. B **639**, 604 (2006) [doi:10.1016/j.physletb.2006.07.013](https://doi.org/10.1016/j.physletb.2006.07.013) [arXiv:hep-ex/0606014](https://arxiv.org/abs/hep-ex/0606014)
5. *Search for a strongly decaying neutral charmed pentaquark*, J. M. Link *et al.* [FOCUS Collaboration], Phys. Lett. B **622**, 229 (2005) [doi:10.1016/j.physletb.2005.07.023](https://doi.org/10.1016/j.physletb.2005.07.023) [arXiv:hep-ex/0506013](https://arxiv.org/abs/hep-ex/0506013)
4. *Measurement of the doubly Cabibbo suppressed decay $D^0 \rightarrow K^+\pi^-$ and a search for charm mixing*, J. M. Link *et al.* [FOCUS Collaboration], Phys. Lett. B **618**, 23 (2005) [doi:10.1016/j.physletb.2005.05.020](https://doi.org/10.1016/j.physletb.2005.05.020) [arXiv:hep-ex/0412034](https://arxiv.org/abs/hep-ex/0412034)
3. *The target silicon detector for the FOCUS spectrometer*, J. M. Link *et al.* [FOCUS Collaboration], Nucl. Instrum. Meth. A **516**, 364 (2004) [doi:10.1016/j.nima.2003.08.163](https://doi.org/10.1016/j.nima.2003.08.163) [arXiv:hep-ex/0204023](https://arxiv.org/abs/hep-ex/0204023)
2. *Total forward and differential cross section of neutral D mesons produced in 500 GeV/c π^- -nucleon interactions*, E. M. Aitala *et al.* [E791 Collaboration], Phys. Lett. B **462**, 225 (1999) [doi:10.1016/S0370-2693\(99\)00900-4](https://doi.org/10.1016/S0370-2693(99)00900-4) [arXiv:hep-ex/9906034](https://arxiv.org/abs/hep-ex/9906034)
1. *Correlations between D and $\bar{D}$ mesons produced in 500 GeV/c π^- -nucleon interactions*, E. M. Aitala *et al.* [E791 Collaboration], Eur. Phys. J. direct C **1**, 4 (1999) [doi:10.1007/s101059900c0004](https://doi.org/10.1007/s101059900c0004) [arXiv:hep-ex/9809029](https://arxiv.org/abs/hep-ex/9809029)

Internal reviewer

30. *K_S^0 and $\Lambda(\bar{\Lambda})$ two-particle femtoscopic correlations in PbPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV*, A. M. Sirunyan *et al.* [CMS Collaboration], Phys. Lett. B **857**, 138936 (2024) [doi:10.1016/j.physletb.2024.138936](https://doi.org/10.1016/j.physletb.2024.138936) [arXiv:2301.05290](https://arxiv.org/abs/2301.05290)
29. *Observation of the B_c^+ Meson in Pb-Pb and pp Collisions at $\sqrt{s_{NN}}=5.02$ TeV and Measurement of its Nuclear Modification Factor*, A. Tumasyan *et al.* [CMS Collaboration], Phys. Rev. Lett. **128**, 252301 (2022) [doi:10.1103/PhysRevLett.128.252301](https://doi.org/10.1103/PhysRevLett.128.252301) [http://www.arXiv.org/abs/2201.02659](https://arxiv.org/abs/2201.02659)
28. *Search for lepton-flavor violating decays of the Higgs boson in the $\mu\tau$ and $e\tau$ final states in proton-proton collisions at $\sqrt{s} = 13$ TeV*, A. M. Sirunyan *et al.* [CMS Collaboration], Phys. Rev. D **104**, 032013 (2021) [doi:10.1103/PhysRevD.104.032013](https://doi.org/10.1103/PhysRevD.104.032013) [arXiv:2105.03007](https://arxiv.org/abs/2105.03007)
27. *Observation of a New Excited Beauty Strange Baryon Decaying to $\Xi_b^- \pi^+ \pi^-$* , A. M. Sirunyan *et al.* [CMS Collaboration], Phys. Rev. Lett. **126**, 252003 (2021) [doi:10.1103/PhysRevLett.126.252003](https://doi.org/10.1103/PhysRevLett.126.252003) [arXiv:2102.04524](https://arxiv.org/abs/2102.04524)
26. *Search for disappearing tracks in proton-proton collisions at $\sqrt{s} = 13$ TeV*, A. M. Sirunyan *et al.* [CMS Collaboration], Phys. Lett. B **806**, 135502 (2020) [doi:10.1016/j.physletb.2020.135502](https://doi.org/10.1016/j.physletb.2020.135502) [arXiv:2004.05153](https://arxiv.org/abs/2004.05153)
25. *Production of Λ_c^+ baryons in proton-proton and lead-lead collisions at $\sqrt{s_{NN}} = 5.02$ TeV*, A. M. Sirunyan *et al.* [CMS Collaboration], Phys. Lett. B **803**, 135328 (2020) [doi:10.1016/j.physletb.2020.135328](https://doi.org/10.1016/j.physletb.2020.135328) [arXiv:1906.03322](https://arxiv.org/abs/1906.03322)
24. *Search for disappearing tracks as a signature of new long-lived particles in proton-proton collisions at $\sqrt{s} = 13$ TeV*, A. M. Sirunyan *et al.* [CMS Collaboration], JHEP **1808**, 016 (2018) [doi:10.1007/JHEP08\(2018\)016](https://doi.org/10.1007/JHEP08(2018)016) [arXiv:1804.07321](https://arxiv.org/abs/1804.07321)

23. *Search for new long-lived particles at $\sqrt{s} = 13$ TeV*, A. M. Sirunyan *et al.* [CMS Collaboration], Phys. Lett. B **780**, 432 (2018) [doi:10.1016/j.physletb.2018.03.019](#) [arXiv:1711.09120](#)
22. *Measurement of b hadron lifetimes in pp collisions at $\sqrt{s} = 8$ TeV*, A. M. Sirunyan *et al.* [CMS Collaboration], Eur. Phys. J. C **78**, 457 (2018) Erratum: [Eur. Phys. J. C **78**, 561 (2018)] [10.1140/epjc/s10052-018-5929-3](#), [doi:10.1140/epjc/s10052-018-6014-7](#) [arXiv:1710.08949](#)
21. *Searches for R -parity-violating supersymmetry in pp collisions at $\sqrt{s} = 8$ TeV in final states with 0-4 leptons*, V. Khachatryan *et al.* [CMS Collaboration], Phys. Rev. D **94**, no. 11, 112009 (2016) [doi:10.1103/PhysRevD.94.112009](#) [arXiv:1606.08076](#)
20. *Multiplicity and rapidity dependence of strange hadron production in pp , pPb , and $PbPb$ collisions at the LHC*, V. Khachatryan *et al.* [CMS Collaboration], Phys. Lett. B **768**, 103 (2017) [doi:10.1016/j.physletb.2017.01.075](#) [arXiv:1605.06699](#)
19. *Measurement of the underlying event activity using charged-particle jets in proton-proton collisions at $\sqrt{s} = 2.76$ TeV*, V. Khachatryan *et al.* [CMS Collaboration], JHEP **1509**, 137 (2015) [doi:10.1007/JHEP09\(2015\)137](#) [arXiv:1507.07229](#)
18. *Limits on the Higgs boson lifetime and width from its decay to four charged leptons*, V. Khachatryan *et al.* [CMS Collaboration], Phys. Rev. D **92**, 072010 (2015) [doi:10.1103/PhysRevD.92.072010](#) [arXiv:1507.06656](#)
17. *Search for Long-Lived Neutral Particles Decaying to Quark-Antiquark Pairs in Proton-Proton Collisions at $\sqrt{s} = 8$ TeV*, V. Khachatryan *et al.* [CMS Collaboration], Phys. Rev. D **91**, 012007 (2015) [doi:10.1103/PhysRevD.91.012007](#) [arXiv:1411.6530](#)
16. *Search for disappearing tracks in proton-proton collisions at $\sqrt{s} = 8$ TeV*, V. Khachatryan *et al.* [CMS Collaboration], JHEP **1501**, 096 (2015) [doi:10.1007/JHEP01\(2015\)096](#) [arXiv:1411.6006](#)
15. *Long-range two-particle correlations of strange hadrons with charged particles in pPb and $PbPb$ collisions at LHC energies*, V. Khachatryan *et al.* [CMS Collaboration], Phys. Lett. B **742**, 200 (2015) [doi:10.1016/j.physletb.2015.01.034](#) [arXiv:1409.3392](#)
14. *Measurement of pseudorapidity distributions of charged particles in proton-proton collisions at $\sqrt{s} = 8$ TeV by the CMS and TOTEM experiments*, S. Chatrchyan *et al.* [CMS and TOTEM Collaborations], Eur. Phys. J. C **74**, 3053 (2014) [doi:10.1140/epjc/s10052-014-3053-6](#) [arXiv:1405.0722](#)
13. *Study of the production of charged pions, kaons, and protons in pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV*, S. Chatrchyan *et al.* [CMS Collaboration], Eur. Phys. J. C **74**, 2847 (2014) [doi:10.1140/epjc/s10052-014-2847-x](#) [arXiv:1307.3442](#)
12. *Measurement of neutral strange particle production in the underlying event in proton-proton collisions at $\sqrt{s} = 7$ TeV*, S. Chatrchyan *et al.* [CMS Collaboration], Phys. Rev. D **88**, 052001 (2013) [doi:10.1103/PhysRevD.88.052001](#) [arXiv:1305.6016](#)
11. *Multiplicity and transverse momentum dependence of two- and four-particle correlations in pPb and $PbPb$ collisions*, S. Chatrchyan *et al.* [CMS Collaboration], Phys. Lett. B **724**, 213 (2013) [doi:10.1016/j.physletb.2013.06.028](#) [arXiv:1305.0609](#)
10. *Measurement of the Λ_b^0 lifetime in pp collisions at $\sqrt{s} = 7$ TeV*, S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1307**, 163 (2013) [doi:10.1007/JHEP07\(2013\)163](#) [arXiv:1304.7495](#)
9. *Study of the inclusive production of charged pions, kaons, and protons in pp collisions at $\sqrt{s} = 0.9, 2.76$, and 7 TeV*, S. Chatrchyan *et al.* [CMS Collaboration], Eur. Phys. J. C **72**, 2164 (2012) [doi:10.1140/epjc/s10052-012-2164-1](#) [arXiv:1207.4724](#)

8. *Study of the $D^0 \rightarrow \pi^- \pi^+ \pi^- \pi^+$ decay*, J. M. Link *et al.* [FOCUS Collaboration], Phys. Rev. D **75**, 052003 (2007) [doi:10.1103/PhysRevD.75.052003](https://doi.org/10.1103/PhysRevD.75.052003) [arXiv:hep-ex/0701001](https://arxiv.org/abs/hep-ex/0701001)
7. *A Measurement of the D_s^+ lifetime*, J. M. Link *et al.* [FOCUS Collaboration], Phys. Rev. Lett. **95**, 052003 (2005) [doi:10.1103/PhysRevLett.95.052003](https://doi.org/10.1103/PhysRevLett.95.052003) [arXiv:hep-ex/0504056](https://arxiv.org/abs/hep-ex/0504056)
6. *Studies of correlations between D and $\bar{D}$ mesons in high energy photoproduction*, J. M. Link *et al.* [FOCUS Collaboration], Phys. Lett. B **566**, 51 (2003) [doi:10.1016/S0370-2693\(03\)00808-6](https://doi.org/10.1016/S0370-2693(03)00808-6) [arXiv:hep-ex/0305018](https://arxiv.org/abs/hep-ex/0305018)
5. *Charm system tests of CPT and Lorentz invariance with FOCUS*, J. M. Link, *et al.* [FOCUS Collaboration], Phys. Lett. B **556**, 7 (2003) [doi:10.1016/S0370-2693\(03\)00103-5](https://doi.org/10.1016/S0370-2693(03)00103-5) [arXiv:hep-ex/0208034](https://arxiv.org/abs/hep-ex/0208034)
4. *A new measurement of the Ξ_c^0 lifetime*, J. M. Link *et al.* [FOCUS Collaboration], Phys. Lett. B **541**, 211 (2002) [doi:10.1016/S0370-2693\(02\)02239-6](https://doi.org/10.1016/S0370-2693(02)02239-6) [arXiv:hep-ex/0206069](https://arxiv.org/abs/hep-ex/0206069)
3. *A High Statistics Measurement of the Λ_c^+ Lifetime*, J. M. Link *et al.* [FOCUS Collaboration], Phys. Rev. Lett. **88**, 161801 (2002) [doi:10.1103/PhysRevLett.88.161801](https://doi.org/10.1103/PhysRevLett.88.161801) [arXiv:hep-ex/0202001](https://arxiv.org/abs/hep-ex/0202001)
2. *A study of the decay $D^0 \rightarrow K^+ \pi^-$* , J. M. Link *et al.* [FOCUS Collaboration], Phys. Rev. Lett. **86**, 2955 (2001) [doi:10.1103/PhysRevLett.86.2955](https://doi.org/10.1103/PhysRevLett.86.2955) [arXiv:hep-ex/0012048](https://arxiv.org/abs/hep-ex/0012048)
1. *A Measurement of lifetime differences in the neutral D -meson system*, J. M. Link *et al.* [FOCUS Collaboration], Phys. Lett. B **485**, 62 (2000) [doi:10.1016/S0370-2693\(00\)00694-8](https://doi.org/10.1016/S0370-2693(00)00694-8) [arXiv:hep-ex/0004034](https://arxiv.org/abs/hep-ex/0004034)

Non-Peer-Reviewed Publications

The documents listed below are those for which I made significant contributions and were never submitted for peer review.

5. *The Need for an R&D and Upgrade Program for CMS Software and Computing*, P. Elmer, S. Rappoccio, K. Stenson, and P. Wittich, [arXiv:1308.1247](https://arxiv.org/abs/1308.1247)
4. *A more exact solution for incorporating multiplicative systematic uncertainties in branching ratio limits*, K. Stenson, [arXiv:physics/0605236](https://arxiv.org/abs/physics/0605236)
3. *Update to Proposal for an Experiment to Measure Mixing, CP Violation and Rare Decays in Charm and Beauty Particle Decays at the Fermilab Collider – BTeV*, G. Y. Drobyshev *et al.* [BTeV Collaboration], [doi:10.2172/1295667](https://doi.org/10.2172/1295667)
2. *B physics at the Tevatron: Run II and beyond*, K. Anikeev *et al.*, [arXiv:hep-ph/0201071](https://arxiv.org/abs/hep-ph/0201071)
1. A. Kulyavtsev *et al.*, *Proposal for an Experiment to Measure Mixing, CP Violation and Rare Decays in Charm and Beauty Particle Decays at the Fermilab Collider – BTeV*, [doi:10.2172/993204](https://doi.org/10.2172/993204)

Conference Talks

13. “ATLAS and CMS results on bottom and charm quarks” at Aspen 2018: The Particle Frontier, Aspen, CO – March 2018.

12. “Radiative penguins at hadron machines” at Flavor Physics and CP Violation 2013, Buzios, Rio, Brasil – May 2013.
11. “Future of heavy flavor physics at ATLAS and CMS” at Particle Physics at the Intensity Frontier, Argonne National Laboratory, Chicago, IL – April 2013.
10. “Single and Double-Particle Studies at CMS” at the 22nd Rencontres de Blois on Particle Physics and Cosmology, Blois, France – July 2010. Proceedings in: Ludwik Celnikier, Jacques Dumarchez, Boaz Klima, and Jean Trần Thanh Vân, editors, *Proceedings of the XXIInd Rencontres de Blois*, Thế Giới Publishers.
9. “Search for Pentaquarks and Double-Charm Baryons from FOCUS” at the 2004 Meeting of the Division of Particles and Fields of the American Physical Society, University of California, Riverside, CA – August 2004. Proceedings in: Int. J. Mod. Phys. **A20** (2005) 3745.
8. “A FOCUS Search for Charm Mixing” at the 2004 Meeting of the Division of Particles and Fields of the American Physical Society, University of California, Riverside, CA – August 2004. Proceedings in: Int. J. Mod. Phys. **A20** (2005) 3689.
7. “Charm Physics from FOCUS” at the 19th International Workshop on Weak Interactions and Neutrinos, Lake Geneva, WI – October 2003.
6. “Recent Results in Charm Physics” at the American Physical Society April Meeting 2003, Philadelphia, PA – April 2003.
5. “CP Violation in Charm” at the International workshop on Heavy Quarks and Leptons 2002, Vietri sul Mare, Salerno, Italy – May 2002. Proceedings in: G. Cataldi, F. Grancagnolo, R. Perrino, and S. Spagnolo, editors, *Proceedings of Heavy Quarks and Leptons 2002, Frascati Physics Series 28*, INFN Laboratori Nazionali di Frascati, 2002.
4. “BTeV: Status and physics prospects” at the 18th International Workshop on Weak Interactions and Neutrinos, Christchurch, New Zealand – January 2002.
3. “Hadronic Decays of Charm Particles” at the 9th International Symposium on Heavy Flavor Physics, Caltech, Pasadena, CA – September 2001. Proceedings in: Anders Ryd and Frank C. Porter, editors, *9th International Symposium on Heavy Flavor Physics, AIP Conference Proceedings 618*, American Institute of Physics, 2002.
2. “Charm Production from Fermilab Fixed-Target Programs” at XXXIV Rencontres de Moriond (QCD and High Energy Hadronic Interactions), Les Arcs, France, March 1999. Proceedings in: Jean Trần Thanh Vân, editor, *Proceedings of the XXXIVth Rencontres de Moriond, ’99 QCD and High Energy Hadronic Interactions*, Thế Giới Publishers.
1. “E791: High Statistics Charm Production with a π^- Beam” at Heavy Quarks at Fixed Target, Fermi National Accelerator Laboratory, October, 1998. Proceedings in: Harry W. K. Cheung and Joel N. Butler, editors, *Heavy Quarks at Fixed Target, AIP Conference Proceedings 459*, American Institute of Physics, 1998.

Colloquia/Seminars

10. University of Colorado Boulder colloquium, *Searching beyond the Standard Model at the LHC*, 10/31/2018
9. Colorado State University colloquium, *Search for Supersymmetry at CMS*, 10/24/2016

8. University of Colorado Boulder colloquium, *Results from the CMS experiment*, 10/19/2011
7. Vanderbilt University colloquium, *Results from the CMS experiment*, 4/7/2011
6. University of Illinois – Chicago colloquium, *Particle Physics at the Energy Frontier*, 11/7/2007
5. Colorado State University colloquium, *Particle Physics at the Energy Frontier*, 10/23/2006
4. University of Colorado Boulder colloquium, *The Search for Pentaquarks*, 3/1/2005
3. University of Minnesota seminar, *Charm Mixing and Rare Decay from FOCUS*, 2/20/2004
2. Fermilab seminar, *Study of D^0 - $\bar{D}^0$ hadronic mixing and doubly Cabibbo suppressed decays*, 3/11/2002
1. University of Colorado Boulder colloquium, *BTeV – A next generation beauty and charm factory*, 3/14/2001

Public Talks

6. University of Colorado Boulder Retired Faculty Association, *The Higgs discovery and beyond*, 11/16/2016
5. University of Colorado Boulder Saturday Physics Series, *The Higgs boson and more from the LHC*, 11/9/2013
4. Colorado/Wyoming Society of Physics Students at the University of Wyoming, *Particle physics at the Energy Frontier*, 4/16/2011
3. Cafe Scientifique in Boulder, *Particle physics at the CERN LHC collider*, 12/14/2010
2. University of Colorado Boulder Saturday Physics Series, *A superconducting proton collider*, 3/14/2009
1. The Lab at Belmar, *A superconducting proton collider*, 7/31/2008

Grants and Awards

5/1/2013–3/31/2027: DOE Grant DE-SC0010005 (DE-FG02-13ER41921)
 12/1/2006–4/30/2013: DOE Grant DE-FG02-04ER41290
 1/1/2015–12/31/2016: U.S. CMS SOW for environmental chamber construction
 1/1/2012–12/31/2012: Senior CMS LHC Physics Center Fellowship for salary and travel
 10/1/2007–9/30/2008: U.S. CMS MOU for environmental chamber construction and travel
 10/1/2006–9/30/2007: U.S. CMS MOU for environmental chamber construction
 7/1/2006–6/30/2007: CRCW Junior Faculty Development Award