

Christine Natrass
christine.natrass@utk.edu
(865) 974-6211

- Positions**
- Full professor in relativistic heavy ion physics at the University of Tennessee, Knoxville (Aug. 2023 – current)
 - Associate professor in relativistic heavy ion physics at the University of Tennessee, Knoxville (Aug. 2018 – Aug. 2023)
 - Assistant professor in relativistic heavy ion physics at the University of Tennessee, Knoxville (Aug. 2012 – Aug. 2018)
 - Postdoctoral researcher, University of Tennessee, Knoxville (Aug. 2009 – July 2012)
- Education**
- Yale University Physics M.Sc. 2005, M.Phil. 2006, Ph.D. December 2009
 - Colorado State University B.S. 2003 cum laude; Physics, Biochemistry, and Physical Science majors; Chemistry, Math, and German minors
- Thesis**
- “[System, energy, and flavor dependence of jets through di-hadron correlations in heavy ion collisions](#).” Defended July 20, 2009 Advisor: John Harris.
- External Funding**
- Department of Energy grant for relativistic heavy ion physics research (Co-PI Ken Read). Approximately \$1.2M/year.
 - NSF funding for the 13th International Workshop on High-pT Physics in the RHIC/LHC Era for \$6,028 to support student and post-doctoral attendees
 - NSF funding for the 2019 National nuclear Physics Summer School (Co-PIs Nadia Fomin and Miguel Madurga)
 - NSF subcontract through Wayne State for participation in the JETSCAPE Collaboration. Approximately \$25k/year.
 - Collaborative research: Conferences for Undergraduate Women in Physics for \$8,000 from the NSF November 2011 – September 2012 (Co-PI Adriana Moreo)
 - Subcontract of Conferences for Undergraduate Women in Physics grant from the DOE November 2011 – November 2012 (PI Sarah Demers, Yale) for \$6,200
- Collaboration Memberships**
- ECCE/EPIC collaboration – April 2021 – present
 - JETSCAPE collaboration – July 2018 – present
 - sPHENIX collaboration – July 2016 – present
 - ALICE collaboration – August 2009 – present
 - PHENIX collaboration – August 2009 – May 2017
 - ALICE EMCal collaboration – July 2008 - present
 - STAR collaboration – June 2003 – August 2009
- Publications**
- “[Interpretable Machine Learning Methods Applied to Jet Background Subtraction in Heavy Ion Collisions](#),” Tanner Mengel, Patrick Steffanic, Charles Hughes, Antonio Carlos Oliveira da Silva, Christine Natrass. Accepted to PRC Letters.
 - “[Separating signal from combinatorial jets in a high background environment](#),” P. Steffanic, C. Hughes, C. Natrass. Accepted to PRC.
 - “[How Community Agreements Can Improve Workplace Culture in Physics](#),” Emanuela Barzi, Simonetta Liuti, Christine Natrass, Roxanne Springer, Charles H. Bennett. Submitted as part of the Snowmass 2021.
 - “[Data and Analysis Preservation, Recasting, and Reinterpretation](#),” Stephen Bailey et al. Contributed heavy ion component.
 - “[Measurements of the groomed and ungroomed jet angularities in pp collisions at \$\sqrt{s} = 5.02\$ TeV](#).” JHEP 05 061 (2022). On internal review committee
 - “[First measurements of N-subjettiness in central Pb-Pb collisions at \$\sqrt{s_{NN}}=2.76\$ TeV](#).” JHEP 10 003 (2021). Chair of internal review committee
 - “[Model studies of fluctuations in the background for jets in heavy ion collisions](#),” Charles Hughes, Antonio Da Silva, and Christine Natrass. Phys. Rev. C 106, 2022, 044915.
 - “[Measurement of charged jet cross section in pp collisions at \$\sqrt{s}=5.02\$ TeV](#),” (ALICE Collaboration) Phys. Rev. D 100, 092004 (2019). Chair of internal review committee.

- “Measurement of electrons from heavy-flavour hadron decays as a function of multiplicity in p-Pb collisions at $\sqrt{s_{NN}}=5.02$ TeV,” (ALICE Collaboration). JHEP02 (2020) 077. On internal review committee.
- “Methods for separation of deuterons produced in the medium and in jets in high energy collisions,” Natasha Sharma, Tony Perez, Andy Castro, Lokesh Kumar, Christine Nattrass, Phys. Rev. C **98**, 014914 (2018).
- “Event plane dependence of the flow modulated background in di-hadron and jet-hadron correlations in heavy ion collisions,” Christine Nattrass and Takahito Todoroki, Phys. Rev. C **97**, 054911 (2018).
- “Jet quenching: an iconic result revisited,” Christine Nattrass, Phys. Rev. C **97**, 034916 (2018).
- “Reaction plane dependence of jet-hadron correlations in Pb-Pb collisions at $\sqrt{s_{NN}}=2.76$ TeV,” Phys. Rev. C **101**, 064901 (2020). Supervised work, on paper committee.
- “Review of Jet Measurements in Heavy Ion Collisions,” Megan Connors, Christine Nattrass, Rosi Reed, Sevil Salur. Rev. Mod. Phys. **90**, 025005 (2018).
- “Disappearance of the Mach Cone in heavy ion collisions,” Christine Nattrass, Natasha Sharma, Joel Mazer, Meghan Stuart, Aram Bejnoon. Phys. Rev. C **94**, 011901 (2016).
- “Measurement of transverse energy at midrapidity in Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV,” (ALICE Collaboration). Phys. Rev. C **94** (2016), 034903. Paper committee chair. Did majority of analysis, led the group working on the analysis, and wrote the majority of the paper and analysis note.
- “Near-side azimuthal and pseudorapidity correlations using neutral strange baryons and mesons in d+Au, Cu+Cu and Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV” (STAR collaboration) Phys. Rev. C **94** (2016), 014910. Did analysis and writing and wrote analysis note with Jana Bielcikova.
- “Background subtraction in di-hadron and jet-hadron correlations,” Natasha Sharma, Joel Mazer, Meghan Stuart, and Christine Nattrass. Phys. Rev. C **93** (2016), 044915.
- “Nuclear modification of strange and multi-strange hadrons in Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV,” (ALICE Collaboration). To be submitted to EPJC. On internal review committee.
- “Measurement of two-particle correlations with respect to second- and third-order event planes in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV,” (PHENIX collaboration). Phys. Rev. C **99**, 054903 (2019). Chair of internal review committee.
- “Charged jet cross section and fragmentation in proton-proton collisions at $\sqrt{s} = 7$ TeV,” (ALICE Collaboration). Phys. Rev. D **99**, 012016 (2018). On paper committee, stepped in as chair.
- “Measurement of parity-violating spin asymmetries in W^\pm production at midrapidity in longitudinally polarized p+p collisions,” (PHENIX collaboration) Phys. Rev. D **93**, 051103 (2016). On Internal Review Committee.
- “D-meson production in p-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV” (ALICE Collaboration) Phys. Rev. Lett. **113** (2014) 232301. On Internal Review Committee.
- “ $K^*(892)^0$ and $\Phi(1020)$ production in Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV” (ALICE Collaboration) Phys. Rev. C **91**, 024609 (2015). On Internal Review Committee.
- “Heavy-flavor electron-muon correlations in p+p and d+Au collisions at $\sqrt{s_{NN}} = 200$ GeV,” (PHENIX Collaboration) Phys. Rev. C. **89**, 034915 (2014). Paper Preparation Committee. Helped with writing.
- “System size and energy dependence of near-side di-hadron correlations” (STAR collaboration) Phys. Rev. C **85** (2012) 014903. Did the majority of the analysis and writing and wrote the majority of the internal analysis note.
- “Particle yield modification in jet-like azimuthal di-hadron correlations in Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV” (ALICE collaboration) Phys. Rev. Lett. **108**, 092301 (2012). On internal review committee.
- “Measurements of Bottom Quark Production from electron hadron Angular Correlations in pp Collisions at $\sqrt{s} = 200$ GeV,” (STAR Collaboration) Phys. Rev. Lett. **105**, 202301 (2010). On internal Godparent committee.
- “An Experimental Exploration of the QCD Phase Diagram: The Search for the Critical Point and the Onset of De-confinement,” (STAR Collaboration) arXiv:1007.2613. Performed calculations for high-pt triggered di-hadron correlations.
- “System size dependence of associated yields in hadron-triggered jets,” (STAR Collaboration)

Phys. Lett. B **683** (2010) 123. Helped with Cu+Cu data analysis.

- “ALICE EMCAL Physics Performance Report”, (ALICE Collaboration) [arXiv:1008.0413v1](https://arxiv.org/abs/1008.0413v1). Helped with analysis for heavy flavor capabilities.
- "ALICE electromagnetic calorimeter technical design report" (ALICE Collaboration) CERN-LHCC-2008-014, CERN-ALICE-TDR-014, (2008). Part of ALICE EMCAL Collaboration.
- “Performance of prototypes for the ALICE electromagnetic calorimeter,” Nuclear Inst. and Methods in Physics Research A 615 (2010) 6-13. Part of ALICE EMCAL Collaboration.
- "Elastic properties of $\text{LaSn}_x\text{Ni}_{5-x}$ compounds,” (O. Yehekel, C. E. Natrass, R. G. Leisure, I. Jacob, R. C. Bowman), J Appl Phys 95 (3): 1089-1095 (2004).
- "Temperature dependence of the elastic moduli of polycrystalline $\text{LaAl}_x\text{Ni}_{5-x}$ and $\text{LaSn}_x\text{Ni}_{5-x}$,” (J.E. Atteberry, D.S. Agosta, C.E. Natrass, R. G. Leisure, I. Jacob, R. C. Bowman) Journal of Alloys and Compounds, Volume 376, Issues 1-2, 139. (2004).
- *Full publication list available upon request*

Invited Talks

- [RHIC/AGS Annual Users' Meeting DEI Workshop](#) (August 2023)
- [APS April Meeting](#) (Minneapolis, April 2023)
- [Conference on the Interaction between Particle and Nuclear Physics](#) (Florida, August 2022)
- [Winter Workshop on Nuclear Dynamics](#) (Puerto Vallarta, Mexico, March 2022)
- [JETSCAPE School](#) (July 2021)
- [Institute for Nuclear Theory jet workshop](#) (Online July 2021)
- [Heavy Flavor QGP workshop on Rivet](#) (Online April 2021)
- [Winter Workshop on Nuclear Dynamics](#) (Puerto Vallarta, Mexico, March 2020)
- [Jet Tools](#) (Bergen, Norway May 2019)
- [JETSCAPE Workshop](#) (Texas January 2019)
- [Opportunities and Challenges with Jets at the LHC and Beyond](#) (Wuhan, China June 2018)
- [Conference on the Intersections between Particle and Nuclear Physics](#) (California June 2018)
- [Conference for Undergraduate Women in Physics](#) (Virginia January 2018)
- [National Society of Black Physicists](#) (Atlanta November 2017)
- [APS Division of Nuclear Physics meeting](#) (Pennsylvania October 2017)
- [High pT Physics in the RHIC-LHC Era](#) (Bergen, Norway October 2017)
- [International Symposium on Multiparticle Dynamics](#) (Tlaxcala, Mexico September 2017)
- [QCD@LHC](#) (Debrecen, Hungary August 2017)
- [Women in Physics Canada](#) (Toronto, Canada July 2017)
- [Winter Workshop on Nuclear Dynamics](#) (Utah January 2017)
- [Southeastern Section of the APS](#) (Virginia November 2016)
- [US LHC Annual Users Meeting](#) (California October 2016)
- [Hot Quarks](#) (Texas August 2016)
- [RHIC/AGS User's Meeting](#) (New York June 2016)
- [High pT Physics in the RHIC-LHC Era](#) (New York April 2016)
- [Epiphany](#) (Crakow, Poland January 2016)
- [Southeastern Section of the American Physical Society](#) (Kentucky November 2013)
- [High Pt at the LHC](#) (Grenoble, France November 2013)
- [Southeastern Section of the American Physical Society](#) (Virginia October 2011)
- [Eleventh Workshop on Non-Perturbative Quantum Chromodynamics](#) (Paris, France June 2011)
- [Southeast Conference for Undergraduate Women in Physics](#) (North Carolina January 2011)
- [US LHC User's Meeting](#) (New York October 2010)
- [International Workshop on the Interplay between Soft and Hard Interactions](#) (Catania, Italy September 2010)
- [Southeastern Section of the American Physical Society](#) (Georgia November 2009)
- [2009 RHIC/AGS User's Meeting](#) (New York June 2009)
- [physics at the LHC workshop](#) (Prague, Czech Republic February 2009)
- [BNL workshop on the Ridge](#) (New York September 2008)
- [Hot Quarks](#) (Colorado August 2008)
- [Gordon Conference](#) (New Hampshire June 2008)
- [Gertrude Goldhaber Prize Lecture](#) (New York May 2008)

- Research Advisees**
- Post-doctoral researchers:
 - Sookhyun Lee (January 2023 – current)
 - Charles Hughes (Aug. 2022 – Oct. 2022, Postdoctoral researcher at Iowa State University)
 - Antonio Da Silva (Aug. 2019 – August 2021, Postdoctoral researcher at Iowa State University)
 - Redmer Bertens (Sept. 2016 – January 2019, Data analyst at KPMG)
 - Adam Matyja (Aug. 2016 – Dec. 2017, Research assistant professor in Krakow)
 - Natasha Sharma (Aug. 2014 – Jan. 2016, Ramanujan Fellow, Panjab University)
 - Abhisek Sen (Jan. 2013 – June 2015, Primary advisor: Ken Read, postdoctoral researcher, Iowa State University)
 - Graduate students:
 - Christal Martin (May 2021 – current)
 - Tanner Mengel (August 2020 – current)
 - Alex Aukerman (Masters, August 2020 – December 2021)
 - Pat Steffanic (June 2018 – current)
 - Austin Schmier (June 2018 – current)
 - Charles Hughes (Aug. 2015 – July 2022, postdoctoral researcher at UTK)
 - Will Witt (Masters, Aug. 2015 – August 2021, data science consultant at ABS Group)
 - Andy Castro (Aug. 2012 – Dec. 2019, Research Scientist at Leidos)
 - Biswas Sharma (Masters April 2018, Cognitive Functions Engineer at Intelligent Artifacts Inc.)
 - Joel Mazer (PhD Nov. 2016, postdoctoral researcher at Rutgers University)
 - Kyle Schmoll (PhD June 2017, Primary advisor: Ken Read, Uptycs, Inc.)
 - Rebecca Scott (PhD Nov. 2016, Primary advisor: Soren Sorensen, Lockheed Martin)
 - Irakli Martashvili (MS July 2014, Primary advisor: Ken Read)
 - Undergraduate:
 - Shannon Harris (June 2023 – current)
 - Hugh Jones (June 2023 – current)
 - Andrew McAninch (June 2023 – current)
 - Josie Hakansen (June 2023 – current)
 - Joesph Beller (September 2022 – current)
 - Micah Hillman (September 2022 – current)
 - Sean Grace (June 2022 – December 2022, UTK undergraduate)
 - Nikolas Nelson (June 2022 – August 2023, UTK graduate student in medical physics)
 - Justin Piel (June 2021 – May 2022, Stetson undergraduate, PhD student in Physics at Purdue)
 - Adam Tilley (June 2021 – August 2021)
 - Kip Hunt (June 2021 – August 2021)
 - Jason Spriggs (June 2021 – May 2022)
 - Taylor Sussmane (February 2021 – August 2021, UTK undergraduate)
 - Jacob Gouge (May 2020 – December 2020, PhD student in physics at UTK)
 - Immanuel Schmidt (May 2020 – August 2020)
 - Brittany Contreras (May 2020 – August 2020, Research Asst. Colo. School of Public Health)
 - Christal Martin (May 2019 – May 2020, PhD student in Physics at UTK)
 - Tanner Mengel (January 2019 – May 2020, UTK physics graduate student)
 - Ben Smith (co-supervised with Soren Sorensen, June 2018 – May 2020, Ball Aerospace)
 - Jerrica Wilson (June 2018 – May 2019, Pilot)
 - Ricardo Santos (Berea, June 2018 – August 2018, PhD student at UConn)
 - Mariah McCreary (June 2018 – December 2018)
 - Tom Krobatsch (May 2017 – May 2019, UTK Joint Institute for Computational Sciences)
 - James Neuhaus (Aug. 2016 – May 2019, PhD student in physics at UTK)
 - Alex Aukerman (Jan. 2017 – May 2018)
 - Nathan Webb (Jan. 2018 – May 2018, Data analyst at Lowes)
 - Tony Perez (Aug. 2014 – May 2017, Graduate student, University of Illinois, Chicago)
 - Tara Skiba (Aug. 2016 – May 2017)
 - Aram Bejnood (Aug. 2014 – May 2015)
 - Meg Stuart (June 2014 – Aug. 2016, Fulbright Scholar, Hungary)
 - Caroline Bowen (June – July 2014)

- Zachary Coin (August 2014 – Dec. 2014)
- Xieyue Fan (June 2008 – May 2009, primary advisor: John Harris)

- Awards**
- UTK SPS Teacher of the Year (2016)
 - APS CSWP [Woman Physicist of the Month](#) (May 2012)
 - [Gertude Goldhaber Prize](#) to recognize substantial promise and accomplishment by a female graduate student in physics (May 2008)
 - American Association of Physics Teachers Teaching Assistant Award (June 2008)
 - Certificate of Appreciation from RHIC/AGS Users' Executive Committee (May 2008)
 - Barry Goldwater Scholar (2002-2003 school year)

- Teaching**
- Honors Introductory Physics for Scientists and Engineers II (Spring 2022), Honors Introductory Physics for Scientists and Engineers I (Fall 2021, Fall 2022, Fall 2023) and II (Spring 2022), Introductory Physics for Scientists and Engineers II (Spring 2021), Introductory Physics for Scientists and Engineers I (Fall 2020), Seminar on Careers in Physics (Spring 2020), Course-based Undergraduate Research Experience in Relativistic Heavy Ion Physics (Spring 2018, Fall 2019, Fall 2020, Fall 2021), Introductory Physics for Engineers II (Fall 2019), Classical Mechanics I (Fall 2015, 2016, 2017) and II (Spring 2016, 2017, 2018), Introductory physics for biological scientists I (Spring 2013, 2014) and II (Fall 2013, 2014), Modern Physics (Fall 2012, Spring 2019, Spring 2020)
 - Discussion leader for UTK “Life of the Mind” freshman seminar (2011-2015)
 - Undergraduate advisor (Spring 2013 - current)
 - Attended Yale graduate school course “Fundamentals of Teaching in the Natural Sciences”
 - Level II International Tutor Certification from the College Reading and Learning Association
 - Teaching assistant introductory physics lab for biological scientists (Fall 2003, Spring 2004, Fall 2004, Spring 2005, Summer 2005, Fall 2005, Spring 2006, Fall 2006); differential equations (Spring 2007); mathematical methods for physicists (Fall 2007); introductory physics (Spring 2008); Quantum Physics and Beyond seminar (Fall 2008); undergraduate electrodynamics (Spring 2009)
 - CSU College of Natural Science Tutorial Hall tutor, Aug. 1999 - Jan. 2000, Aug. 2001 - May 2002, tutoring calculus, differential equations, statistics, and organic chemistry

- Contributed Talks**
- [APS April Meeting](#) (April 2021)
 - [APS DNP](#) (October 2020)
 - [APS April Meeting](#) (April 2020)
 - [Heavy Flavor QGP workshop on Rivet](#) (April 2021)
 - [DNP Meeting](#) (October 2020)
 - [APS April Meeting](#) (April 2020)
 - [Winter Workshop on Nuclear Dynamics](#) (March 2018)
 - [Santa Fe Jets and Heavy Flavor Workshop](#) (January 2018)
 - [European Particle Physics meeting](#) (Venice, Italy July 2017)
 - [Trojkráľová Konferencia](#) (Bratislava, Slovakia January 2016)
 - [LBNL Jet Summer School](#) (California June 2010)
 - [Quark Matter](#) (Jaipur, India February 2008)
 - [Trojkráľová Konferencia](#) (Banská Bystrica, Slovakia January 2008)
 - [American Physical Society Division of Nuclear Physics](#) (Virginia October 2007)
 - [Strangeness in Quark Matter](#) (Levoča, Slovakia June 2007)
 - [American Physical Society April Meeting](#) (Florida April 2007)
 - [American Physical Society Division of Nuclear Physics](#) (Tennessee October 2006)
 - [American Physical Society March Meeting](#) (Texas March 2003)

- Colloquia**
- [University of Houston](#) (December 2020)
 - [University of Tennessee](#) (September 2017)
 - [Georgia State University](#) (March 2017)
 - [Colorado State University](#) (October 2012)
 - [University of Mississippi](#) (October 2012)

•University of Tennessee (February 2012)

Seminars

- LBNL Theory Seminar (July 2020)
- PHENIX uBNL Seminar (July 2020)
- LBNL Heavy Ion Theory group (July 2020)
- Czech Technical University (May 2019)
- Berea College (November 2017)
- Argonne National Laboratory (October 2016)
- Davidson (March 2016)
- Duke (January 2016)
- Nuclear Physics Institute, Prague (January 2016)
- University of Tennessee, Knoxville (October 2015)
- Rutgers (March 2015)
- Ohio University (September 2014)
- Clark Atlanta (March 2014)
- Wayne State University (February 2014)
- Oak Ridge National Laboratory brown bag lunch seminar (March 2012)
- Oak Ridge National Laboratory Physics Division (Tennessee June 2011)
- University of Tennessee Knoxville (Tennessee April 2011)
- PHENIX Focus Seminar (New York April 2011)
- University of Virginia (Virginia March 2011)
- University of California Davis (California June 2010)
- University of Tennessee Knoxville (Tennessee November 2009)
- University of Kentucky (Kentucky October 2009)
- Lawrence Livermore National Laboratory (California April 2009)
- University of Tennessee Knoxville (Tennessee April 2009)
- Stony Brook University (New York May 2008)
- Palaver Seminar (Frankfurt, Germany January 2008)

Poster

Presentations

- Hard Probes (Online, June 2020)
- Quark Matter (Chicago, January 2017)
- Quark Matter (Annecy, France June 2011)
- RHIC/AGS User's Meeting (New York June 2010)
- ORNL Women in Science and Engineering Poster Session (Tennessee April 2010)
- Yale Alumni Conference (Connecticut November 2008)
- International Conference on Women in Physics (Seoul, South Korea October 2008)
- Gordon Conference (New Hampshire June 2006)
- American Physical Society Four Corners meeting (Utah November 2002)
- American Physical Society Four Corners meeting (New Mexico November 2001)

Conference

Proceedings

- “Measurements of jets in ALICE,” C. Nattrass (ALICE), *J. Phys.: Conf. Ser.* **589** 011015 (2015), Proceedings for 9th International Workshop on High-pT Physics at LHC
- “Results from ALICE,” C. Nattrass (ALICE), eConf C1106064 (2011). Proceedings for Eleventh Workshop on Non-Perturbative Quantum Chromodynamics 2011.
- “Di-hadron correlations at RHIC,” C. Nattrass, *Il Nuovo Cimento* 34, 31 (2011). Proceedings, for the Workshop on the Interaction between Soft and Hard 2010.
- “System size and energy dependence of the near-side of high-p_T triggered di-hadron correlations in STAR,” C. Nattrass (STAR), PoS High-pTphysics09:024 (2009). Proceedings for the 4th International Workshop on High-pT physics at LHC 2009.
- “Energy and system dependence of high-p_T triggered two-particle near-side correlations,” C. E. Nattrass (STAR), *Eur.Phys.J.C*62:265-269 (2009). Proceedings for Hot Quarks.
- “System and energy dependence of strange and non-strange particle correlations in STAR at RHIC,” C. E. Nattrass (STAR), *J. Phys. G.* 35 104110 (2008). Proceedings for Quark Matter 2008.
- “System size dependence of strange particle correlations in Cu+Cu and Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV in STAR at RHIC,” C. E. Nattrass (STAR), *J. Phys. G.* 35 044063 (2008). Proceedings

for Strange Quark Matter 2007.

- Workshop and Conference Organization**
- Chair of local organizing committee for National Society of Black Physicists November 2023 annual meeting
 - On organizing committee for Quark Matter 2023 (Texas)
 - On organizing committee for JETSCAPE 2022 Online School
 - On organizing committee for JETSCAPE 2022 Online School
 - Main organizer in role as incoming chair of RHIC/AGS Annual Users' Meeting (Online)
 - Chair of organizing committee for HEPData at RHIC workshop
 - Chair of organizing committee for Rivetizing Heavy Ion Collisions at RHIC workshop
 - Co-chair of organizing committee for 3rd JETSCAPE Online School
 - Chair of organizing committee for 3rd JETSCAPE Workshop
 - On organizing committee for 2019 National Nuclear Physics Summer School at UTK
 - Host of ALICE-USA meeting at UTK in March 2019
 - On organizing committee for The Past, Present, and Future of Relativistic Heavy Ion Collisions in celebration of Miklos Gyulassy's 70th birthday in March 2019
 - Chair of organizing committee for High pT in the RHIC and LHC Era 2019
 - On organizing committee for RIKEN BNL Research Center Workshop: The Definition of Jets in a Large Background June 25-27, 2018
 - Co-organizer for jet workshop at RHIC/AGS User's Meeting 2017
 - On organizing committee for US LHC annual meeting 2016, 2017
 - On organizing committee for the Conference on the Interactions between Particle and Nuclear Physics 2015
 - Co-convenor for "Quark Matter and High Energy Heavy Ion Collisions" session and gave [heavy ion summary talk](#) at the 11th conference on the Intersections of Particle and Nuclear Physics May 28 – June 3, 2012
 - Chair of organizing committee for [Southeast Conference for Undergraduate Women in Physics](#) (January 2012)
 - Gave two day [ALICE Software tutorial](#) directed at undergraduates at Cal Poly (June 2010)
 - Member of organizing committee and graduate panel for the [Southeast Conference for Undergraduate Women in Physics 2010](#)
 - Organizer of [one day meeting](#) for students and post doctoral researchers in heavy ion physics at UTK (November 2009)
 - Member of organizing committees for Conference for Undergraduate Women in Physics at Yale (January 2008 & January 2009)
 - Member of organizing committee for STAR collaboration meeting (March 2009)
 - Organizer of one day meeting between theorists and experimentalists in heavy ion physics Yale-Columbia Day at Yale (May 2008)
 - Co-organizer for 2008 RHIC/AGS Users' Meeting workshop on diversity in physics
 - Member of organizing committees for RHIC/AGS User's Meeting (June 2007 & June 2008)
- Service work and training**
- Undergraduate Program Director (August 2020 – current)
 - On site visit teams for APS Committee on the Status of Women in Physics
 - On JETSCAPE talks committee (Summer 2019 – current)
 - Reviewer for PRC, PLB, NSF, NSF GRFP, IOP
 - Served as judge for EURECA undergraduate research poster session (Spring 2012)
 - Served as a PHENIX MuID on-call expert (2012 - 2014)
 - Completed CERN training for working at heights, radiation safety, and working in confined spaces
 - Trained as ALICE shift leader and DAQ/CTP shifter
 - Served as ALICE EMCal on-call expert (2010 - 2015)
 - Tested and commissioned of front end electronics and LED boards for the ALICE EMCal (2009 - 2015)
 - Contributed to programming electronics for the PHENIX VTX (2010)
 - Served as computer system administrator for the Yale heavy ion group (2005 - 2009)
 - Contributed to cosmic calibration of ALICE EMCal (2008)

- Trained as STAR shift leader and detector operator
- Contributed to the calibration of the STAR Silicon Vertex Tracker (SVT) (2006)
- Studied V^0 reconstruction with the STAR SVT in the year 5 run for the SVT review (2006)
- Helped re-cable STAR SVT and make new electronic boards for the read-out system (2006)
- Studied calibration of STAR SVT using the lasers (2006-2007)
- Quality assurance for the Year 7 run for the strangeness working group (2008)

- Committee Work**
- Elected Brookhaven National Laboratory (BNL) RHIC/AGS Users' Executive Committee (August 2023 – June 2026)
 - Past-chair, RHIC AGS User's Executive Committee (July 2022 – June 2023)
 - On APS DNP DE&I Committee (February 2022 – current)
 - On APS DNP Executive Committee (April 2022 – April 2024)
 - Chair, RHIC AGS User's Executive Committee (July 2021 – June 2022)
 - On ECCE Diversity and Inclusion Committee (May 2021 – current, chair June 2021 – June 2022)
 - Chair-elect, RHIC AGS User's Executive Committee (July 2020 – June 2021)
 - On sPHENIX Diversity and Inclusion Committee (Summer 2019 – current)
 - On Division of Nuclear Physics Program Committee (Summer 2019 – Summer 2021)
 - Chair of Graduate Admissions Committee (Fall 2018 – Spring 2019)
 - Committee on Departmental Undergraduate Advising and Recruiting (Fall 2012 - current)
 - Committee on Undergraduate Curriculum for Majors (Fall 2012 – Spring 2018)
 - EMCal jet coordinator in ALICE (Spring 2015 – Summer 2016)
 - Analysis coordinator for transverse energy measurements in ALICE (July 2010 – current)
 - US LHC User's Executive Committee elected member (January 2016 – January 2018)
 - Elected Brookhaven National Laboratory (BNL) RHIC/AGS Users' Executive Committee (June 2014 – June 2017)
 - Elected Brookhaven National Laboratory (BNL) RHIC/AGS Users' Executive Committee student/post-doctoral fellow representative (June 2006 – June 2008)
 - Elected to BNL Association for Students And Post-doctoral fellows board (October 2006 – October 2007)
 - Elected Juniors' representative on the STAR council (April 2008 – May 2009)

- Community Service and Outreach**
- [Saturday Morning Physics](#) (Knoxville April 2019)
 - [Saturday Morning Physics](#) (Knoxville March 2017)
 - [Ask a Physicist on Women in Physics on Facebook Live](#) (April 2017)
 - [Saturday Morning Physics](#) (Knoxville April 2017)
 - [Ask a Physicist on Heavy ion Physics on Facebook Live](#) (November 2016)
 - [National Society of Black Physicists Annual Meeting](#) (Chicago October 2016)
 - [Science Cafe talk](#) in Knoxville, TN (April 2013)
 - [Science Cafe talk](#) in Oxford, MI (October 2012)
 - On organizing committee for panel on The Under-represented Majority at the 2012 of the Southeastern Section of the APS
 - Co-organizer of panel on The Under-represented Majority at the 2011 of the Southeastern Section of the APS
 - Subject of [ALICE Matters Focus On](#) (February 2011)
 - Subject of Knoxville Girl Scout Museum exhibit on former Girl Scouts who are scientists (Fall 2010)
 - Served as a blogger for ALICE for [US LHC Blog](#) (April 2010 – January 2011)
 - Served on the graduate panel for Southeast Conference for Undergraduate Women in Physics 2010
 - Talk for BWIS on [The 3rd International Conference on Women in Physics](#) (April 2009)
 - Gave a talk on my career as a woman in physics for the girls at [Riverhead Middle School](#) in panel organized by the Long Island Fund for Women and Girls (April 2009)
 - Authored an article in RHIC News January 13, 2009 issue “[After the 3rd International Conference on Women in Physics – What We as a Community Can Do](#)”
 - Authored an article in APS Committee on the Status of Women in Physics Gazette Spring 2009 issue “[How the high energy community can help women succeed in physics](#)”

- Served on the graduate panel for the Conference for Undergraduate Women in Physics at Yale 2009
- Participated as a mentor in the Women In Science At Yale program (2008-2009)
- Member of the US delegation to the 2008 IUPAP International Conference on Women in Physics
- Volunteer for Girls' Science Investigations, a science education program for middle school girls (2007-2008)
- Volunteer for BNL Summer Sundays public tours of RHIC and STAR in 2006 and 2007 and PHENIX in 2010