

**Christine Nattrass**  
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- 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 13<sup>th</sup> 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**
- “[Measurements of Groomed-Jet Substructure of Charm Jets Tagged by  \$D^0\$  Mesons in Proton-Proton Collisions at  \$\sqrt{s}=13\$  TeV](#),” Phys. Rev. Lett. 131, 192301 (ALICE), on IRC.
  - “[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 Nattrass. PRC108 L021901(2023)6
  - “[Separating signal from combinatorial jets in a high background environment](#),” P. Steffanic, C. Hughes, C. Nattrass. PRC 108 (2023) 2, 024909
  - “[How Community Agreements Can Improve Workplace Culture in Physics](#),” Emanuela Barzi, Simonetta Liuti, Christine Nattrass, 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 Nattrass. 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. Yeheskel, C. E. Nattrass, 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. Nattrass, 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:
  - Niseem Magdy (October 2023 – current)
  - Sookhyun Lee (January 2022 – 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:
  - Thibor Bernardon (June 2024 – current)
  - Ifty Ahmed (June 2024 – current)
  - Christal Martin (May 2021 – current)
  - Tanner Mengel (August 2020 – current)
  - Alex Aukerman (Masters, August 2020 – December 2021)
  - Pat Steffanic (June 2018 – May 2024)
  - Austin Schmier (June 2018 – January 2024, postdoctoral researcher at Trento)
  - Charles Hughes (Aug. 2015 – July 2022, postdoctoral researcher at Iowa State)
  - 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:
  - Aiden Hill (January 2024 – current)
  - Shannon Harris (June 2023 – May 2024)
  - Hugh Jones (June 2023 – August 2023, UTK undergraduate)
  - Andrew McAninch (June 2023 – May 2024, UTK undergraduate)
  - Josie Hakansen (June 2023 – current)
  - Joesph Beller (September 2022 – May 2024, graduate student)
  - Micah Hillman (September 2022 – August 2023, UTK undergraduate)
  - 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 Bejnoon (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<sub>T</sub> 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<sub>T</sub> triggered two-particle near-side correlations,” C. E. Nattrass (STAR), Eur.Phys.J.C62:265-269 (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 3<sup>rd</sup> JETSCAPE Online School
- Chair of organizing committee for 3<sup>rd</sup> 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 70<sup>th</sup> 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-convener 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 3<sup>rd</sup> 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