

Renee H. Fatemi

Contact Information

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Education

- Ph.D., Nuclear Physics, 2002; University of Virginia, Charlottesville, VA
- B.S., High Distinction, Physics, 1995; University of Virginia, Charlottesville, VA

Academic Positions

- Professor, University of Kentucky, 2019-present.
- Director of Undergraduate Studies, University of Kentucky, 2017-2021.
- Associate Professor, University of Kentucky, 2013-2019.
- Assistant Professor, University of Kentucky, 2007-2013.
- Senior Postdoctoral Research Associate, Massachusetts Institute of Technology, 2005-2007.
- Postdoctoral Research Associate, Indiana University Cyclotron Facility, 2001 - 2005.
- Research Assistant, University of Virginia, 1997 - 2001.
- Teaching Assistant, University of Virginia, 1995 - 1997.
- Research Assistant, University of Virginia, Summer 1994 & 1995.

Awarded Research Grants and Fellowships

- **National Science Foundation** *Jets as a tool to study Hadronization at RHIC and the EIC*. Award #2412373, Award Period: 9/01/2024 - 8/31/2027, Award Amount: **\$675,000**, Award P.I.: **Renee Fatemi**.
- **National Science Foundation** *Using Muons and Protons to Probe the Structure of the Universe*. Award #2110293, Award Period: 9/01/2021 - 8/31/2024, Award Amount: **\$634,087**, Award P.I.: **Renee Fatemi**.
- **National Science Foundation** *MRI Consortium: Development of a Forward Calorimetry Upgrade for the STAR Detector*, Award #1920077, Award Period: 9/01/2019 - 8/31/2022, Award Amount: **\$1.9M**, Award Co-P.I.: **Renee Fatemi**.
- **National Science Foundation** *Using Muons and Protons to Probe the Structure of the Universe*. Award #1812417, Award Period: 8/01/2018 - 7/31/2021, Award Amount: **\$555,000**, Award P.I.: **Renee Fatemi**.
- **Fermilab Intensity Frontier Fellowship** *The g2Sim Simulation Package*. Award Period: 8/01/2016 - 7/31/2017, Award Amount: **\$31,000**, Award P.I.: **Renee Fatemi**.

- **National Science Foundation** *Spin as a Probe into the Structure of the Universe*. Award #1504099, Award Period: 5/30/2015 - 5/30/2018, Award Amount: **\$482,950**, Award P.I.: **Renee Fatemi**.
- **National Science Foundation** *MRI Consortium: Development of Instrumentation to Measure the Spin Precession Frequency in the Fermilab Muon g-2 Experiment* Award #1337538, Award Period: 9/1/2013-9/1/2016, Award Amount :**\$2.55M** University of Kentucky Component **\$250K**, Award P.I.:**Tim Goringe** Co-P.I.:**Renee Fatemi**.
- **National Science Foundation** *Fundamental Studies of the Proton Spin in QCD*. Award #1205991, Award Period: 5/11/2012 - 4/30/2015, Award Amount: **\$480,000**, Award P.I.: **Renee Fatemi**.
- **National Science Foundation** *Fundamental Studies of the Nucleon Spin in QCD*. Award #0855498, Award Period: 9/1/2009 - 8/31/2012, Award Amount: **\$479,875**, Award P.I.: **Renee Fatemi**.

Professional Activities

- Members of the Nuclear Science Advisory Committee Facilities Committee (2024)
- Member of the Nuclear Science Advisory Committee Long Range Planning Committee Working Group (2022-2023).
- Past-Chair of the Electron-Ion Collider Users Group Steering Committee (2023-2024).
- Chair of the Electron-Ion Collider Users Group Steering Committee (2021-2023).
- Member of the CERN Scrutiny Committee (2019-2021).
- Member of the Nuclear Science Advisory Committee (2019-2022).
- Member of the DNP Executive Committee (2018-2019).
- Member of the Jefferson Laboratory Physics Advisory Committee (2015-2019).
- Member of the APS Topical Group on Hadronic Physics Committee (2017-2018).
- NSF Nuclear Science Review Panel for proposal awards (2011- present).
- DOE Nuclear Science Review Panel for Early Career awards (2017).
- Reviewer for NSF Research, Post-doctoral Fellowship, MRI proposals and Career Award Programs (2009-present).
- Reviewer for DOE Early Career, FAIR and Standard Research Programs (2012-present).
- Member of the APS Division of Nuclear Physics Program Committee (2015-2016).
- Member of the Nuclear Science Advisory Committee Long Range Planning Committee Working Group (2014-2015).
- Member of Brookhaven National Lab’s User Congressional Delegation (2012-2019).
- Brookhaven National Lab Users Executive Committee Member (2007-2009).

Conference Organization

- Member of International Committee for the 25th International Spin Symposium (SPIN 2023-present)
- Member of Program Committee Intersections (2022)
- Member of Program Committee for 24th International Spin Symposium (SPIN2020)
- Member of International Committee for 5th Initial Stages Conference (IS2019)
- Convener for the “High Intensity and Precision Physics” parallel session for the 13th Conference on the Intersections of Particle and Nuclear Physics (CIPANP 2018)

- Local program committee member for the 22nd International Symposium on Spin Physics (SPIN2016)
- Organizer of the RIKEN Workshop "Emerging Spin and Transverse Momentum Effects in p+p and p+A Collisions" (2016)
- Spin Structure of the Nucleon Convener for the 21st International Symposium on Spin Physics (SPIN2014)

Experimental Affiliations and Contributions

- ePIC Collaboration, *Electron-Ion Collider, Brookhaven National Laboratory, 2022-present*
- g-2 Collaboration, *Fermilab National Laboratory, 2013-present*
- STAR Collaboration, *Relativistic Heavy Ion Collider, Brookhaven National Laboratory, 2002-present*
- BLAST Collaboration, *Bates Laboratory, 2005-present*
- CLAS Collaboration, *Hall B, Thomas Jefferson National Accelerator Facility, 1998-2001*
- E93026 Collaboration, *Hall C, Thomas Jefferson National Accelerator Facility, 1998*
- E155 Collaboration, *End Station A, Stanford Linear Accelerator Center, 1995-1998*

Teaching Experience

- Particle Physics, *University of Kentucky, Spring 2012, 2014, 2022, 2024*
- Nuclear Physics, *University of Kentucky, Spring 2011, 2013, 2015, 2021, 2023*
- Thermodynamics and Statistical Mechanics, *University of Kentucky, Fall 2018, 2019*
- Introduction to Electricity and Magnetism, *University of Kentucky, Fall 2008-2015, 2017, 2020-2022, 2024 & Spring 2016, 2018*
- Optics, Relativity and Thermal Physics, *University of Kentucky, Spring 2008 - 2010, 2025*
- Elementary Lab II, *University of Virginia, Spring 1997*
- Basic Physics Laboratory I and II, *University of Virginia, Fall 1995-1996, Spring 1996*

Advisory Experience

- Postdoctoral Associates
 - Sean Foster, July 2023 - present,
 - Dmitry Kalinkin, August 2022 - present,
 - Anna Driutii, July 2019 - August 2021,
 - Kevin Adkins, August 2017 - August 2018,
Associate Professor at Morehead State University
 - Robert Fersch, August 2008 - June 2012,
Associate Professor at Christopher Newport University
- Graduate Students
 - Chris Larson, June 2023 - present
 - Manny Rosales, September 2020 - present.
 - Hannah Harrison, June 2019- present.
 - Laura Kelton, June 2015 - present.
Visiting Professor at Trinity University

- Suvarna Ramachandran, June 2012 - September 2018.
Associate Professor at Alliance University
- Kevin Adkins, January 2012 - August 2017.
Associate Professor at Morehead State University
- Filmon Misgina, Summer 2011.
- Grant Webb, January 2008 - 2014.
currently Data Scientist at Spotify

o Undergraduate Students

- Caleb West, Fall 2023 - Fall 2024.
- Joel Huether, Summer 2019-Spring 2020.
- John Boston, Summer 2018
- Jesse Melhuish, Spring 2014 - Spring 2016.
- Joe Osborn, Summer 2012-Spring 2013.
- Nathan Rice, Summer 2011.
- Timothy Sweda, Summer 2009-Spring 2010.
- Wayne Witzke, Summer 2009-Spring 2013.
- Nayeem Moulana, Fall 2008.

Honors and Awards

- o Fellow of the American Physical Society 2022
- o University of Kentucky Research Professor Award 2020
- o University of Kentucky College of Arts and Sciences Diversity and Inclusion Award 2017
- o University of Kentucky College of Arts and Sciences Outstanding Teaching Award 2015
- o University of Virginia Graduate School of Arts and Sciences Dissertation Year Fellowship, 2000-2001.
- o Southeastern University Research Association Fellowship award for graduate studies performed at the Thomas Jefferson National Accelerator Facility, 1997-1999.
- o University of Virginia Teaching Center Outstanding Physics Graduate TA Award, 1997.
- o University of Virginia Physics Department Outstanding TA Award, 1996 & 1997.

Invited Conference Talks

- Division of Nuclear Physics Fall Meeting, November 2023, "New Results from the Fermilab g-2 Experiment"
- Division of Nuclear Physics Fall Meeting, November 2020, "The Phase-Acceptance Effect in Run 1 of the Fermilab g-2 Experiment"
- Southeastern Section of the APS Meeting, November 2018, "Status and Progress from the Muon g-2 experiment"
- 23rd International Symposium on Spin Physics, Plenary Session, September 2018, "Spin Phenomena in Jets"
- APS April Meeting, Frontier Physics Enabled by New Facilities session, April 2018, "Exploring New Physics with Muon g-2"

- 8th International Conference on Physics Opportunities at an Electron-Ion Collider, March 2018, “TMD results from RHIC”
- Gordon Conference on Photonuclear Interactions, August 2016, “Recent Results from RHIC-spin”
- Fermilab Users Meeting g-2 Plenary Talk, June 2015, “The new g-2 experiment is ramping up!”
- Workshop on QCD Evolution, May 2015, “Studying Evolution with Jets at STAR.”
- 6th Workshop of the APS Topical Group on Hadronic Physics, April 2015, “Highlights from the RHIC Spin Program.”
- APS Division of Nuclear Physics Workshop: New Results in Spin Physics from Polarized proton beams at RHIC, October 2012, “New Results from PHENIX and STAR.”
- AGS/RHIC Brookhaven National Lab Users Meeting, June 2012, “Report on pp collision in Run 12 from STAR.”
- Jefferson Lab Users Meeting, June 2012, “New Results on Proton Spin from RHIC.”
- American Physical Society, June 2009, “Recent Spin Results from RHIC.”
- 1st Joint Workshop on Energy Scaling in Hadron Collisions, April 2009, “RHIC’s view of Hadron Collisions.”