Curriculum Vitae (short-form)

Personal Details

Name	Dr. Andrew James Ruehe Puckett
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Education

Ph.D., Physics	Massachusetts Institute of Technology. Awarded 2010-02-17. GPA 4.9/5.0
	Thesis: *Recoil Polarization Measurements of the Proton Electromagnetic Form Factor Ratio to High Momentum Transfer*. Accepted 2009-10-13. Link
	Advisor: William Bertozzi, Professor of Physics.
B. S., Physics	University of Virginia, 2004, *with Highest Distinction*. GPA 3.86/4.0

Professional Experience

08/2019-Present	Associate Professor, Physics Department, University of Connecticut, Storrs, CT.
08/2013-08-2019	Assistant Professor, Physics Department. University of Connecticut, Storrs, CT.
01/2012-08/2013	Staff Scientist, Hall B Group. Thomas Jefferson National Accelerator Facility (Jefferson Lab). Newport News, VA
10/2009-12/2011	Director's Postdoctoral Fellow, P-25 Group. Los Alamos National Laboratory, Los Alamos, NM

Honors/Awards

2015	US Department of Energy Office of Science Early Career Award: • Five-year research grant totaling $750,000. • One of 50 proposals selected for funding from about 620 applications. • Link to abstract (page 33).
2009	Southeastern Universities Research Association (SURA)/Jefferson Science Associates (JSA) Thesis Prize (Best Ph.D. thesis completed on research carried out at Jefferson Lab during 2009).
2009-2011	Director's Postdoctoral Fellowship, Los Alamos National Laboratory (accepted).
2009	Director's Postdoctoral Fellowship, Argonne National Laboratory (offered).
2006-2008	SURA/JSA Graduate Fellowship. Fellowship support for half the stipend of my graduate research assistantship.
2006	First prize, SURA annual graduate student poster competition.
2004-2005	Presidential Graduate Fellowship, MIT. Full stipend support with no teaching requirement for selected first-year graduate students in physics.

2004 James W. Elkins Award, University of Virginia (most outstanding graduating physics major).

2004 Phi Beta Kappa, University of Virginia.

2000-2004 Echols Scholar, University of Virginia

Professional Organizations

2013-Present American Association of University Professors (AAUP), National and UConn chapter member.

2005-Present American Physical Society (APS)

- Division of Nuclear Physics (DNP)
- Topical Group on Hadronic Physics (GHP)

Research Experience/Achievements (since Ph.D.)

08/2013-Present University of Connecticut

- Nuclear and particle physics research in experimental Halls A, B and C at Jefferson Lab.
- Spokesperson of approved experiment E12-09-018 studying neutron transverse spin structure in Hall A
- Spokesperson of approved experiment E12-07-109 measuring polarization transfer in high-Q^2 elastic electron-proton scattering.
- Member of Super BigBite Spectrometer (SBS) collaboration in Hall A.
- Representative of experiment E12-09-018 on the SBS Collaboration Coordinating Committee.
- Ring Imaging Cherenkov (RICH) detector preparation for Hall A experiments.
- Detector and physics Monte Carlo simulations for Jefferson Lab experiments.
- Reconstruction software development for SBS experiments.
- Data analysis and publication of physics results from Jefferson Lab experiments.
- Advising of Ph.D. and Masters' thesis students in UConn physics department. One Ph.D. student graduated, two current advisees.
- Supervision of undergraduate research thesis and independent study projects.
- Development of new experiment proposals.
- Development of external research funding. Successfully applied for DOE's Early Career Research Program (see above).
- Postdoctoral mentoring
- Hall A Collaboration Coordinating Committee Secretary, 2017-present

01/2012-08/2013 Jefferson Lab, Hall B Group

- Research, development, design, construction and testing of the High Threshold Cherenkov Counter (HTCC) for the CLAS12 spectrometer in Hall B. The HTCC detects Cherenkov radiation emitted by charged particles moving faster than the speed of light in the CO_2 gas volume of the detector. This detector is used to identify scattered electrons with momenta up to 5 GeV/c.

- Membership and active participation in the physics program of the CLAS collaboration.
- Data analysis and publication of results from Jefferson Lab experiments.
- Quality control, including ultrasonic void detection and laser profile measurements, of soldering process performed on superconducting Rutherford cable by external contractor for the CLAS12 Torus and solenoid magnets.

10/2009-12/2011 Los Alamos National Laboratory, P-25 Group (Director's Postdoctoral Fellowship).

- Analysis, simulation and preparation of publications from completed Jefferson Lab experiment E06-010: the neutron transversity experiment. This experiment, which collected data in 2008-2009, measured the target single spin asymmetries and the beam-target double-spin asymmetries in charged pion electro-production in semi-inclusive deep-inelastic electron scattering (SIDIS) on a transversely polarized Helium-3 target, shedding light on the transverse spin and orbital angular momentum distributions of quarks in the neutron.
- Development of experiment proposals for the JLab 12 GeV Upgrade, including E12-09-018, of which I am a spokesperson, which was approved for 64 beam-days with an "A-" scientific rating by the Jefferson Lab Program Advisory Committee (PAC) at its 38th meeting in August 2011.
- Data analysis and final publication of several experiments related to the proton form factors, including E04-108 (the subject of my Ph.D. thesis), E04-019, and E99-007

Courses Taught

PHYS 3101 Mechanics I

- Spring semester, 2020

PHYS 1600Q Introduction to Modern Physics.

- Fall semester, 2018
- Fall semester, 2017

PHYS 2501W Laboratory in Electricity, Magnetism, and Mechanics.

- Fall semester, 2019
- Fall semester, 2018
- Fall semester, 2014
- Fall semester, 2013

PHYS 1010Q Elements of Physics.

- Fall semester, 2016
- Fall semester, 2015

May 1, 2019