

Curriculum Vitae (short-form)

Personal Details

Name Dr. Andrew James Ruehe Puckett
Address 2152 Hillside Rd. U-3046, Storrs, CT 06269-3046
Office phone (860) 486-7137
Email andrew.puckett@uconn.edu, puckett@jlab.org
Homepage <https://puckett.physics.uconn.edu/>

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

Publications, Talks, and Other Scholarly Output

Last updated: 12/2019 [Publication List](#)

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 and no required commitment to a specific research group 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) <ul style="list-style-type: none"> • Division of Nuclear Physics (DNP) • Topical Group on Hadronic Physics (GHP)

Research Experience/Achievements (since Ph.D.)

08/2013-Present	University of Connecticut <ul style="list-style-type: none"> • 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, 2017-2019 • SBS Collaboration Coordinating Committee Chair, August 2019-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 CO₂ 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
	<ul style="list-style-type: none"> • Spring semester, 2020
PHYS 1600Q	Introduction to Modern Physics.
	<ul style="list-style-type: none"> • Fall semester, 2018 • Fall semester, 2017
PHYS 2501W	Advanced Undergraduate Laboratory
	<ul style="list-style-type: none"> • Fall semester, 2019 • Fall semester, 2018 • Fall semester, 2014 • Fall semester, 2013
PHYS 1010Q	Elements of Physics.
	<ul style="list-style-type: none"> • Fall semester, 2016 • Fall semester, 2015

December 1, 2019