Jason Bane

Address
18 Morrison Ave.
Newport News, VA 23601
(931) 239-0611 jbane@jlab.org

OBJECTIVE

A position in the scientific community utilizing my skills in education, data analysis, and physics.

EDUCATION

Ph.D, Nuclear Physics
University of Tennessee, Knoxville , TN — Planned December 2019
Thesis - The EMC Effect in the $A = 3$ Mirror Nuclei
GPA 3.66

Bachelor of Science, Physics, Minor in Education
University of Tennessee, Knoxville , TN — May 2009
GPA 3.10

PROFESSIONAL EXPERIENCE

U. of Tennessee, Department of Physics and Astronomy, Knoxville, TN,
Graduate Research Assistant — May 2014 – On going

- Designed and constructed front end electrons for an electron spectrometer.
- Maintained and refurbished individual detector components of an electron spectrometer.
- Calibrated detectors and used online analysis to control quality of data during an experiment.
- Preformed data analysis on a large set of data involving multiple nuclear targets.

Graduate Teaching Assistance — August 2012 – May 2015

- Designed and implemented observational and planetarium based astronomy labs.
- Instructed students in laboratory exercises to help conceptualize physics topics.
- Tutored students for home work assistance and test prep.

Clay County Tennessee Education Department, Celina, TN
Secondary Educator — August 2010 – May 2012

- Created lesson plans that included interactive, creative thinking, and discussion driver curriculum for a diverse body of geometry students.
- Constructed lessons that used hands on lap activities, demonstrations, and interactive computer lessons to instruct high school Juniors and Seniors in algebra based physics.
- Used discussion based problem solving lessons to help remedial math students to improve their algebra, geometry and trigonometry skills for post secondary education.
- Math and reading focused tutoring.

COMPUTER SKILLS

Experienced in c++,python, cern-ROOT , latex, and fortran.

PUBLICATIONS

- R. Cruz-Torres, [et al. including **J. Bane**], "Comparing proton momentum distributions in A=3 nuclei via ^{3}He and ^3H(e,e'p) measurements," in preparation, (2019)
- S. N. Santiesteban, S. Alsalmi, D. Meekins, **J. Bane,** et al., "Density Changes in Low Pressure Gas Targets for Electron Scattering Experiments" in preparation (2018)
- H. Dai, [et al. including **J. Bane**], "First Measurement of the Ti(e,e')X Cross Section at Jefferson Lab," Phys. Rev. C 98, 014617 July 2018
- H. Dai, [et al. including **J. Bane**], "First Measurement of the Ar(e,e')X Cross Section at Jefferson Lab," in preparation, (2018)
- P V. Pandey, [et al. including **J. Bane**], "Probing electron-argon scattering for liquid-argon based neutrino-oscillation program," preprint arXiv:1711.01671

HONORS

Jefferson science associates graduate fellowship award (2018)
Chancellors honors for extraordinary professional promise (2016)
DOE office of science graduate student research program award (2015)
Dean's List 2009 Academic Year (2010)

Research Activity

Talk given at the 2nd Workshop on Quantitative Challenges in SRC and EMC Research at MIT, Boston 2019

INTERESTS

Classical piano, jazz, bodybuilding/aerobic exercise, cooking, dancing