Daniel W. Bardayan

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Professional and Educational Experience:

2024-present **Director,** Association for Research at University Nuclear Accelerators (ARUNA)

2023-present **Director,** Institute for Structure and Nuclear Astrophysics (ISNAP)

2020-present **Director,** Nuclear Science Laboratory, University of Notre Dame

2016-present **Professor,** Department of Physics and Astronomy, University of Notre Dame

2013-2016 **Associate Professor,** Department of Physics, University of Notre Dame

2010-2013 **Adjunct Associate Professor,** Department of Physics and Astronomy, University of Tennessee

2008-2013 **Senior Research Staff,** Physics Division, Oak Ridge National Laboratory

2007-2009 **Adjunct Assistant Professor,** Department of Physics and Astronomy, University of Tennessee

2003-2007 **Research Staff**, Physics Division, Oak Ridge National Laboratory

2001-2003 **Wigner Fellow,** Physics Division, Oak Ridge National Laboratory

1999-2001 **Postdoctoral Assoc.,** University of North Carolina at Chapel Hill

1993-1999 **M.S., M. Phil., Ph.D.**, Physics. Yale University.
Dissertation: Explosive $^{17}F(p,\gamma)^{18}Ne$ Burning Through the 3^+ State in ^{18}Ne
Advisor: Peter D. Parker
GPA: All Honors (4.0 equivalent)

1988-1993 **B.S.**, Physics. Mathematics minor. Tennessee Technological University.
GPA: 3.94, Summa Cum Laude

Awards & Honors:

2022 Fellow of the American Physical Society

2021	Fellow of the Notre Dame International Security Center
2017	DOE/NNSA Office of International Nuclear Safeguards Joule Award
2011	ORNL Significant Event Award
2010	DOE Office of Science Early Career Research Program Award
2010	ORNL Scientific Accomplishment by a Team award
2010	ORNL DIRECTOR'S AWARD for Research Accomplishment of the year
2008	Fellow of the Kavli Society
2008	ORNL Significant Event Award
2006	ORNL Significant Event Award
2005	Presidential Early Career Award for Science and Engineering (PECASE)
2005	DOE Office of Science Early Career Scientist and Engineer Award
2004	ORNL Significant Event Award
2003	ORNL Early Career Award for Scientific Achievement
2001	American Physical Society Dissertation Award in Nuclear Physics
2001	ORNL Wigner Fellow
2001	Tennessee Tech. University Distinguished Young Alumnus award
2000	ORNL Author of the Year award
2000	ORNL Significant Research Accomplishment award
1993	Tennessee Tech. University Physics award
1993	Tau Kappa Epsilon Scholarship award

Popular Press Articles:

(Research discussed in the following popular press physics articles.)

- *Physics Today*: COVER ARTICLE-August 2010 issue, and the April, 2001 issue.
- *New Scientist:* April 3, 2014 issue.
- *Physical Review Focus* (http://focus.aps.org): July 9, 1999 article.
- *Astronomy Now*, March 9, 2016 issue (http://astronomynow.com/2016/03/09/dust-grains-could-be-remnants-of-stellar-explosions-billions-of-years-ago/)
- *UPI* March 8, 2016 story (http://www.upi.com/Science_News/2016/03/08/Meteoritic-dust-came-from-stellar-explosions-older-than-the-sun/2581457466545/)
- *Tech Times,* March 9, 2016 story (http://www.techtimes.com/articles/139686/20160309/dust-grains-from-ancient-stellar-explosions-billions-of-years-ago-may-unveil-secrets-of-our-galaxy.htm)
- *Sci-News.com* March 11, 2016 story (http://www.sci-news.com/space/pre-solar-grains-remnants-ancient-novae-03695.html)
- *Science*: October 1, 1999 issue.
- *Science News*: August 7, 1999 issue.
- *ORNL Review*: Vol. 43, No. 2 (2010) issue, Vol. 38, No. 2 (2005) issue, Vol. 36, No. 1 (2003) issue, Vol. 34, No. 2 (2001) issue, Vol. 33, No. 1 (2000) issue, and the Vol. 32, No. 2 (1999) issue.
- *Contemporary Physics*: Vol. 42, No. 5 (2001) issue.
- *APS News*: March, 2001 issue.

- *Nuclear Physics News*: Vol. 10, No. 2 (2000), Vol. 12, No. 3 (2002), and Vol. 13, No. 3 (2003) issues.
- *DOE Pulse*: No. 228, Feb. 12, 2007 issue.
- *ORNL Reporter*: August 2006, December 2003, March 2001, and August, 1999 issues.
- *TTU Visions Magazine*: Spring 2004, Spring 2002 issue, and the Spring 2001 issues.
- *Cookeville Herald-Citizen Newspaper*: October 4, 2001 issue.
- *The Tennessean Newspaper*: August 6, 2006 issue.
- *The Knoxville News Sentinel Newspaper*: July 28, 2006 edition., and a January 19, 2010 web blog (http://blogs.knoxnews.com/munger/2010/01/stellar_explosions_the_recover.html#more).
- *Physics World*: February, 2002 issue., *Physics World News*, "Rare-isotope decay links tiny grains to stellar explosions", March 16, 2016.
- *Newswise (http://www.newswise.com)*: Dec 1, 2004 edition, June 2, 2010 edition.
- *Newswise (http://www.newswise.com)*: Jan. 13, 2020 - Article ID: 725052.
- *APS Press Release for Spring Meeting*: May 2004 meeting.
- *AAS Press Release*: January 2003 meeting.
- *U. S. Department of Energy Press Release*: July 26, 2006.
- *Opportunities in Nuclear Science-A Long-Range Plan for the Next Decade:* April 2002.
- *PhysOrg*.com (http://www.physorg.com/news2212.html): Dec. 2, 2004 edition.
- *Oakridger,* July 28, 2006 and Nov. 26, 2003 editions.
- *Sevier County News Newspaper*: August 9, 2006 issue.
- *The Oak Ridge Observer Newspaper*: August 3, 2006 issue.
- *ND Works*: September 19, 2013 edition.

In addition, research with ^{17}F and ^{18}F beams named as a highlight of 2006 by Dennis Kovar at the DNP Business Meeting in Nashville, 2006 and in the Department of Energy FY2008 Budget Request (http://www.cfo.doe.gov/budget/08budget/Content/Volumes/Vol_4_SC_DA.pdf).

Grants:

"Transfer Reactions on Unstable Nuclei for Nuclear Science Applications", Principal Investigator, $1900K funded by the Department of Energy, Office of Nuclear Physics (2009-2012).

"Studies of Nuclear Reactions that Drive Stellar Explosions and Synthesize the Elements", Principal Investigator, $2500K funded by the Department of Energy, Office of Nuclear Physics (2010-2015).

"Development of a high-density gas-jet target for nuclear astrophysics and reaction studies with rare isotope beams", Co-Principal Investigator, $1000K funded by the Department of Energy, Office of Nuclear Physics (2011-2014).

"Center of Excellence for Radioactive Ion Beam Studies for Stewardship Science", Co-Principal Investigator, $6843K funded by the Department of Energy, National Nuclear Security Administration (2008-2013).

"Nuclear Structure and Nuclear Astrophysics – Renewal October 2013", Co-Principal Investigator, $6500K funded by the National Science Foundation (2014-2017).

"Center of Excellence for Radioactive Ion Beam Studies for Stewardship Science", Co-Principal Investigator, $7980K funded by the Department of Energy, National Nuclear Security Administration (2013-2018).

"JINA Center for the Evolution of the Elements", Senior Investigator, $15020K funded by the National Science Foundation (2014-2019).

"Studies of Nuclear Reactions that Drive Stellar Explosions and Synthesize the Elements", PI, $110,735 subcontract from Oak Ridge National Laboratory (2015).

"A Kinematically Complete, Interdisciplinary, and Co-Institutional Measurement of the $^{19}F(\alpha,n)$ Cross Section for Nuclear Safeguards Science", participant, $1626K funded by the Department of Energy, National Nuclear Security Administration, Sponsor Organization NA-22 (2013-2015).

"Restoration and installation of a world-class spectrometer for nuclear physics experiments at the Notre Dame Nuclear Science Laboratory", Principal Investigator, $200K funded by the Notre Dame Equipment Restoration & Renewal Program (2015-2016).

"Sustaining excellence in nuclear science at the University of Notre Dame", Co-Principal Investigator, $450K funded by the Nuclear Regulatory Commission (2017-2020).

"Nuclear Structure and Nuclear Astrophysics – Renewal November 2016", Co-Principal Investigator, $6160K funded by the National Science Foundation (2017-2020).

"MRI: Development of a unique ion trapping system to test the Standard Model of Physics at the Nuclear Science Laboratory", Co-Principal Investigator, $530K funded by the National Science Foundation (2017-2020).

"FY2018 Equipment Restoration and Renewal Program: Repair of the TwinSol Separator", Principal Investigator, $150K funded by the University of Notre Dame Office of Research (2018-2019).

"WoU-MMA: Nuclear Physics at the Notre Dame Nuclear Science Laboratory Providing a Window on the Universe (PHY-2011890)", Principal Investigator, $8100K funded by the National Science Foundation (2020-2023).

"Neutron irradiation station at the NSL", Co-principal investigator, $500,665 funded by the Department of Energy (2021-2022).

"Development of SABRE: The Silicon Array for Branching Ratio Experiments", Principal Investigator, $573,000 funded by the National Science Foundation as a Major Research Instrumentation project (2021-2024).

"WoU-MMA: Nuclear Physics at the Notre Dame Nuclear Science Laboratory Providing a Window on the Universe (PHY-2310059)", Principal Investigator, $12,000K funded by the National Science Foundation (2023-2027).

"Sample analysis for Forever Analytical Systems", Principal Investigator, $40K funded by Forever Analytic Systems (2024-2025).

"Sample analysis for Forever Analytical Systems", Principal Investigator, $40K funded by Forever Analytic Systems (2025-2026).

"MRI: Track 3 Acquisition of Helium Recovery Equipment to Enable New and Sustainable Research and Training at the University of Notre Dame", Co-Principal Investigator, $335K funded by the National Science Foundation (2026-2029).

Selected Professional Activities:

Schools:

2025	Invited lecturer at the Nuclear Physics from Multi-Messenger Mergers (NP3M) summer school
2022	Hands-on lecturer at Exotic Beam Summer School
2019	Invited lecturer at Exotic Beam Summer School
2009	Invited lecturer at Exotic Beam Summer School
2006	Hands-on lecturer at Exotic Beam Summer School
2002	Organizing Committee for Exotic Beam Summer School

Research and Steering Committees:

2025	Review Committee of Edwards Accelerator Lab, Ohio Univ.
2024-present	Director of the Association for Research at University Nuclear Accelerators (ARUNA)
2020	Academy of Finland Center Proposal Review Committee
2016-2021	FRIB Users Organization Executive Committee
2016-2020	NSCL Program Advisory Committee
2016-2020	ATLAS Users Executive Committee
2016	UC Lab Fees Research Program Committee
2015-2020	SECAR Collaboration Council
2013	DIANA Technical Review Committee
2012	UC Lab Fees Research Program Committee
2012-2013	ORNL Seed Money Review Committee
2011-2018	ATLAS Program Advisory Committee

Funding Agency Review Committees:

2026	NSF panel
2021	NSF panel
2015	NSF site visit panel, chair
2013	NSF site visit panel

2010	NSF site visit panel, chair

Conference Advisory and Organizing Committees:

2025-2027	International Conference on Nuclei in the Cosmos organizing committee
2026	Organizing Committee of the Workshop on Shaping the Future of the U.S. Radiation Chemistry and Nuclear Science Enterprise
2024	Conference on Applications of Accelerators to Research and Industry, organizer of Nuclear Astrophysics Sessions
2022	Astrophysics Town Hall Meeting/White paper writing committee
2022	ARUNA Town Hall Meeting/White paper writing committee
2022	Conference on Applications of Accelerators to Research and Industry, organizer of Nuclear Astrophysics Sessions
2022	Exotic Beam Summer School Organizing Committee
2018	Conference on Applications of Accelerators to Research and Industry, organizer of Nuclear Astrophysics Session
2016-present	Symposium on Nuclear Physics Cocoyoc, International Advisory Committee
2016	Conference on Applications of Accelerators to Research and Industry, organizer of Nuclear Astrophysics Session
2016	DNP Meeting Satellite Workshop on Recoil Separators, International Advisory Committee
2016	JINA Workshop on Experiments for X-ray Burst Nucleosynthesis, organizer
2015	Gordon Research Conference, discussion leader
2015	JINA mini-workshop on Explosive H and He burning, organizer
2014	Low Energy Community Meeting, session organizer
2014	Conference on Applications of Accelerators to Research and Industry, organizer of Nuclear Astrophysics Session
2013	Gordon Research Conference, discussion leader
2012	Nuclear Astrophysics Town Meeting, discussion leader
2011-2012	Workshop on Nuclear Radiation Detectors, breakout session convener
2010	International Conference on Nuclear Structure, international scientific advisory committee
2006	HRIBF Workshop on Nuclear Measurements for Astrophysics, chair of the organizing committee
2004	Conference on Exotic Nuclei and Masses, organizing committee

Publication Reviewer:

Nuclear Physics A
European Physical Journal A
Physical Review C
Physical Review Letters
Nuclear Instruments and Methods
Astrophysical Journal
Astrophysical Journal Letters
Physics Letters B
Journal of Physics G
Progress in Particle and Nuclear Physics

Funding Agency Proposal Reviewer:

National Science Foundation MRI
National Science Foundation CAREER
National Science Foundation Single Investigator
DOE Early Career
DOE Single Investigator
DOE SBIR
NSERC Canada
U.K. Science and Technology Facilities Council

Selected Organizational Activities:

Director, Institute for Structure and Nuclear Astrophysics (ISNAP) (2023-present).

Director of Notre Dame Nuclear Science Lab (2020-present).

Director of the Association for Research at University Nuclear Accelerators (2024-present).

HRIBF facility mentor of the *JENSA Gas Jet Target*, *SIDAR* silicon detector array, the *Daresbury Recoil Separator*, the windowless hydrogen gas target, and the *Oak Ridge Rutgers Barrel Array* (ORRUBA).

Chair of Decanal Review Committee: reappointment of the Notre Dame Dean of the College of Science (2025).

Education and United Way coordinator for the ORNL Physics Division (2008-2013).

Notre Dame Core Curriculum Integration Committee (2018-present)

Notre Dame International Security Center's (NDISC) Faculty Advisory Board (2018-present)

Notre Dame Physics Department Graduate Admissions Committee (2013-2015).

Notre Dame Physics Department Graduate Curriculum Committee (2013-2015).

Notre Dame Physics Department Undergraduate Curriculum Committee (2019-2025).

Notre Dame Physics Department Awards Committee (2019-2021, 2025-present).

Notre Dame Physics Department Strategic Planning Committee (2015-2017, 2024-2025).

Notre Dame Physics Department Committee on Appointments and Promotions (2016-2018, 2021-2023).

Medical Cyclotron Advisory Committee (2014-2015).

Liquid He Advisory Committee (2015-2017).

Graduate Candidacy Committee – Clark Casarella(2014), Abu Amiri (2015), Sabrina Strauss (2015), Chris Seymour (2015), Mike Moran (2015), Qian Liu (2015), Matt Hall (2017), Jake Long (2017), Drew Blankstein (2018), Orlando Gomez (2020), Chevelle Boomershine (2021), Abhishek Das (2021), Jes Koros (2021), Kevin Lee (2021), John McDonaugh (2022), Will von Seeger (2024), Adam Sanchez (2024), Cade Dembski (2025), Ruchi Rathod (2026).

PhD Examination Committee – Wenting Lu (2015), Clark Casarella (2017), Abu Amiri (2017), Anna Woodard (2018), Matt Hall (2018), Sabrina Strauss (2020), Qian Liu (2020), Jacob Long (2020), Orlando Gomez (2022), Drew Blankstein (2022), Kevin Lee (2024), Scott Carmichael (2025), Chevelle Boomershine (2025), Miriam Matney (2026), John McDonaugh (2026).

Junior Faculty Mentoring Committee – Manoel Couder (2015-2019), Anna Simon (2017-2020), Tan Ahn (2018-2022), Badih Assaf (2019-2025).

Teaching Experience:

2016-present **Professor, University of Notre Dame**
Physics 10310, Engineering Physics I (Spring 2018, Spring 2019)
Physics 20065, The Science and Strategy of Nuclear Weapons (Fall 2017, Fall 2018, Fall 2019, Fall 2020, Fall 2021, Fall2022, Fall 2023, Fall 2024)
Physics 20061, Nuclear Warfare (Fall 2016)
Physics 61701, Modern Methods for Experimental Nuclear Physics (Spring 2021, Spring 2022, Spring 2023, Spring 2024, Spring 2025, Spring 2026)

2013-2016 **Associate Professor, University of Notre Dame**
Physics 20061, Nuclear Warfare (Fall 2013, Fall 2014, Fall 2015)
Physics 10310, General Physics I for Engineers (Spring 2014, Spring 2015)

2013-present **Undergraduate students mentored**:
Shannon Massey (2014), Daniel Votaw (2014), Ben Becker(2015), Will Boeschenstein(2015), Allison Olshefke (2015), Yingchao Zhang (2015), Chris Brady (2016-17), Scott Carmichael (2016), Ricky LeBlanc (2016), a (2016), Daniel Galvao-Guerra (2016), James Cotter (2017), Gabriel Brown (2017), Ben Riordan (2017), Emmanuel Garcia Berrios (2017), Noah Applegate (2018), Alyssa Davis (2019), Austin Mitchell (2019), Joe Henning (2019), Graham O'Donnell (2021), Sydney Coil (2021-present), Lloyd Templeton (2022), Samuel Thomas (2022), Manel Piera Garrigosa (2022), Melody Shimba (2023), Matt Chapple (2023,2024), Tom Gore (2023-2026), Michael Sterba (2024), Al Sinjari (2024), Michael Potts (2025), Noah Wyatt (2026).

Graduate students mentored:, Matt Hall (2014-2019), Jacob Allen (2015-2022), Oscar Hall (2015), Drew Blankstein (2016-2022), Sam King (2017), Matt Baines (2019), Louis Caves (2018-2020), Scott Carmichael (2018-2025), Chevelle Boomershine (2018-2025), Will von Seeger (2021-present), Cade Dembski (2022-

present), Wesley Sutton (2024-present), Ruchi Rathod (2025-present), Jack Lennon (2025-present).

Post-doctoral scholars mentored: P. D. O'Malley (2014-2017), Jun Hu (2015-2016), Davi Monteiro (2016-2017).

1998-2013 **Research Staff, Oak Ridge National Laboratory**
Undergraduate and graduate students mentored: B.A. Johnson, E. Hannah, J.A. Howard, S. Paulauskas, N. Smith, W. Martin, S. Graves, S. Strauss, J. Wheeler.

Graduate students mentored: K.Y. Chae, Z. Ma, R.J. Livesay, S. Pittman, R.P. Fitzgerald, J.S. Thomas**,** P. D. O'Malley, K. A. Chipps, B. H. Moazen, S. Ahn, A. Ayres, S. Hardy, B. Manning, P. Thompson, T. Pelham.

Post-doctoral scholars mentored: L. Sahin, D.W. Visser, M.S. Johnson, K.L. Jones, S. Pain, C. Matei, C.D. Nesaraja, K.Y. Chae, M. Matos, A. Adekola, W. A. Peters, B. H. Moazen, K. Y. Chae, K. A. Chipps, S. T. Pittman, K. T. Schmitt.

1993-1995 **Laboratory Assistant, Yale University**
Instructed and graded five undergraduate physics laboratory courses.

1990-1993 **Laboratory Assistant, Tennessee Technological University**
Instructed and graded seven undergraduate physics laboratory courses.

Professional and Honor Societies:

1988-Present Sigma Xi, American Physical Society, Division of Nuclear Physics, Southeastern Section of the APS, Prairie Section of the APS, Phi Kappa Phi, Kappa Mu Epsilon, Alpha Lambda Delta, Mortar Board, Society of Physics Students, Sigma Pi Sigma, Physics Club, Alpha Mu Gamma

Appendix – Publications and Presentations

Refereed Publications:

(266 refereed publications, 44 as first author including 3 first-authored Letters and 3 first-authored Physical Review C Rapid Communications articles)

1. **Direct measurement of ^{59}Cu(p,α)^{56}Ni precludes a strong NiCu cycle in Type-I X-ray bursts,** N. Bhathi, J. S. Randhawa, R. Kanungo, J. Refsgaard, M. Alcorta, M. A. Zubair, T. Ahn, C. Andreoiu, D. Bardayan, S. S. Bhattacharjee, B. Davids, G. Christian, A. A. Chen, R. Coleman, P. Garrett, G. F. Grinyer, E. Gyabeng Fuakye, G. Hackman, R. Jain, K. Kapoor, R. Krucken, A. Laffoley, A. Lennarz, J. Liang, Z. Meisel, A. Psaltis, A. Radich, M. Rocchini, J. S. Rojo, N. Saei, M. Sexena, M. Singh, C. Svensson, P. Subramaniam, A. Talebitaher, S. Upadhyayula, C. Waterfield, J. Williams, M. William, Astrophys. J. **999**, 8 (2026).

2. **First measurement of the ^{20}Ne(α,p)^{23}Na reaction at energies relevant for type Ia supernovae,** C. Boomershine, D. W. Bardayan, R. J. deBoer, P. D. O'Malley, S. R. Carmichael, L. Caves, A. Davis, A. Gula, K. Howard, R. Kelmar, A. Mitchell, L. Morales, S. Moylan, D. Robertson, E. Stech, Phys. Rev. C **113**, 065804 (2026).

3. **Decoding γ-ray signatures from core-collapse supernovae: First experimental constraints on the ^{28}Al(p,α)^{25}Mg reaction rate,** M. Abubakar, J. S. Randhawa, S. R. Carmichael, P. D. O'Malley, D. W. Bardayan, J. J. Kolata, R. Longland, C. Dembski, W. S. Porter, W. W. von Seeger, M. Sorensen, T. Psaltis, R. Zite, M. A. Zubair, Phys. Rev. C Letter **113**, L062802 (2026).

4. **Single-nucleon transfer on unstable ^{59}Cu probes NiCu cycle in astrophysical X-ray bursts,** C. O'Shea, G. Lotay, A. Gade D. T. Doherty, H. Schatz, J.S. Randhawa, B. A. Brown, D. Weisshaar, J. Pereira, S. A. Gillespie, D. W. Bardayan, S. Byrne, L. Canete, W. N. Catford, A. Chester, J. Chung-Jung, C. Cousins, S. Coil, H. Crawford, S. Giraud, E. Good, G. Grauvogel, I. Harca, J. Heery, A. Hill, R. Jain, C. Maher, C. Muller-Gatermann, S. Noji, N. D. Pathirana, T. Parry, C. Paxman, A. M. Rogers, A. Sebastian, I. Sultana, J. A. Swartz, A. Tsantiri, S. Uthayakumaar, R. G. T. Zegers, Phys. Rev. Lett. **137**, 022701 (2026).

5. **Breakup of the proton halo nucleus ^{8}B at a sub-Coulomb energy,** K. Palli, A. Pakou, A. M. Moro, P. D. O'Malley, L. Acosta, A. M. Sanchez-Benitez, G. Souliotis, E. F. Aguilera, E. Andrade, D. Godos, O. Sgouros, V. Soukeras, C. Agodi, T. L. Bailey, D. W. Bardayan, C. Boomershine, M. Brodeur, F. Cappuzzello, S. Carmichael, M. Cavallaro, S. Dede, J. A. Duenas, J. Henning, K. Lee, W. S. Porter, F. Rivero, W. W. von Seeger, Phys. Rev. C **111**, 024615 (2025).

6. **Probing the most important ^{14}O(α,p)^{17}F resonance through a ^{17}F(p,p')^{17}F* study,** S. Coil, D. W. Bardayan, P. D. O'Malley, T. L. Bailey, C. Boomershine, S. Carmichael, C.

Dembski, T. Gore, A. M. Houff, C. Jones, J. J. Kolata, K. Lee, G. Mulcahy, W. S. Porter, F. Rivero, J. Rufino, A. Sanchez, W. W. von Seeger, L. Zimmer, R. Zite, Phys. Rev. C **112**, 035804 (2025).

7. **Commissioning of the neutron irradiation station at the University of Notre Dame,** M. Matney, A. Simon, D. Robertson, K. Manukyan, A. Aprahamian, D. W. Bardayan, R. J. deBoer, E. Stech, W. Tan, M. Wiescher, Nucl. Instrum. Methods A 1075, 170406 (2025).

8. **Object detection with deep learning for rare event search in the GADGET II TPC,** T. Wheeler, S. Ravishankar, C. Wrede, A. Adams, T. Ahn, J. Allmond, A. Andalib, A. Anthony, Y. Ayyad, D. Bardayan, D. Bazin, K. Bosmpotinis, T. under, S. Carmichael, S. Cha, A. Chen, K. Chipps, J. Chrisie, I. Cox, J. Dopfer, M. Friedman, J. Garcia-Duarte, E. Good, T. Gray, A. Green, R. Grzywacz, K. Hahn, B. Jain, R. Jain, A. Jaros, E. Jensen, T. King, S. Liddick, B. Longfellow, R. Lubna, R. Mahajan, C. Marshall, Y. Mishnayot, A. Mitchell, F. Montes, T. H. Ogunbeku, J. Owens-Fryar, S. Pain, J. Pereira, E. Pollacco, A. Rogers, L. Schaedig, H. Schatz, Z. Serikow, K. Setoodehnia, L. Sun, J. Surbrook, A. Tsantiri, L. Weghorn, Nucl. Instrum. Methods Phys. Res. A **1080**, 170659 (2025).

9. **Properties of states near E_x=6 MeV in ^{18}Ne through ^{17}F+p scattering,** B. Sudarsan, L. E. Linhardt, J. C. Blackmon, C. M. Deibel, H. E. Gardiner, K. T. Macon, B. C. Rasco, M. Matos, L. T. Baby, D. Santiago-Gonzalez, I. Wiedenhover, E. Koshchiy, G. Rogachev, D. W. Bardayan, Phys. Rev. C **112**, 015810 (2025).

10. **First on-line commissioning experiments at the St. Benedict facility,** W. S. Porter, M. Brodeur, O. Bruce, D. P. Burdette, J. A. Clark, O. Eversole, A. T. Gallant, A. M. Houff, J. J. Kolata, E. Markel, P. D. O'Malley, F. Rivero, G. Savard, D. Schroeder, A. A. Valverde, R. Zite, D. W. Bardayan, S. R. Carmichael, C. Dembski, P. L. D. Magro, W. W. von Seeger, Physica Scripta **100**, 085301 (2025).

11. **^{28}Al half-life measurement and the negative mirror asymmetry between the ^{28}Al(β^-)^{28m}Si and ^{28}P(β^+)^{28m}Si decays,** B. Liu, M. Brodeur, D. W. Bardayan, F. D. Becchetti, C. Boomershine, D. P. Burdette, L. Caves, O. Olivas-Gomez, S. L. Henderson, J. J. Kolata, J. Long, A. D. Nelson, P. D. O'Malley, A. Pardo, R. Zite, Phys. Rev. C **112**, 045505 (2025).

12. **Proton Pandemonium: A first look at the ^{31}Cl($\beta p\gamma$)^{30}P decay scheme**, T. Budner, M. Friedman, L. J. Sun, C. Wrede, B. A. Brown, D. Perez-Loureiro, J. Surbrook, A. Adams, Y. Ayyad, D. W. Bardayan, K. Chae, A. A. Chen, K. A. Chipps, M. Cortesi, B. Glassman, M. R. Hall, M. Janasik, J. Liang, P. O'Malley, E. Pollacco, A. Psaltis, J. Stomps, T. Wheeler, Phys. Rev. C (accepted).

13. **Single-nucleon transfer on unstable ^{59}Cu probes NiCu cycle in astrophysical X-ray bursts,** C. O'Shea, G. Lotay, A. Gade D. T. Doherty, H. Schatz, J.S. Randhawa, B. A. Brown, D. Weisshaar, J. Pereira, S. A. Gillespie, D. W. Bardayan, S. Byrne, L. Canete, W. N. Catford, A. Chester, J. Chung-Jung, C. Cousins, S. Coil, H. Crawford, S. Giraud, E. Good, G. Grauvogel, I. Harca, J. Heery, A. Hill, R. Jain, C. Maher, C. Muller-Gatermann, S. Noji, N. D. Pathirana, T. Parry, C. Paxman, A. M. Rogers, A. Sebastian, I. Sultana, J. A.

Swartz, A. Tsantiri, S. Uthayakumaar, R. G. T. Zegers, Phys. Rev. Lett. **137**, 022701 (2026).

14. **Study of key ^{57}Ni(p,γ)^{58}Cu resonances to understand ^{44}Ti nucleosynthesis in supernovae,** S. R. Carmichael, D. W. Bardayan, S. D. Pain, A. Ratkiewicz, P. D. O'Malley, J. Allen, T. L. Bailey, C. Boomershine, M. Brodeur, C. M. Campbell, M. P. Carpenter, K. A. Chipps, J. A. Cizewski, S. Coil, P. A. Copp, C. Dembski, J. Forson, H. I. Garland, R. Ghimire, T. Bore, C. Jones, K. L. Jones, J. Koros, J. Kovoor, K. Lee, P. L. D. Magro, J. McDonaugh, G. Mulcahy, C. Muller-Gatermann, W. S. Porter, F. Rivero, D. Robertson, J. Rufino, A. T. Sanchez, D. Seweryniak, M. Siciliano, H. Sims, E. Stech, R. Surman, C. C. Ummel, W. W. von Seeger, G. Wilson, S. Zhu, R. Zite, Phys. Rev. Lett. (accepted).

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249. **Identification of new states in ^{26}Si using the ^{29}Si(^{3}He,^{6}He)^{26}Si reaction and consequences for the ^{25}Al(p,γ)^{26}Si reaction rate in explosive hydrogen burning environments,** J.A. Caggiano, W. Bradfield-Smith, R. Lewis, P.D. Parker, D.W. Visser, J.P. Greene, K.E. Rehm, D.W. Bardayan, A.E. Champagne, Phys. Rev. C**65**, 055801 (2002).

250. **Destruction of ^{18}F via ^{18}F(p,α)^{15}O burning through the $E_{c.m.}$ = 665 keV resonance,** D.W. Bardayan, J.C. Blackmon, W. Bradfield-Smith, C.R. Brune, A.E. Champagne, T. Davinson, B.A. Johnson, R.L. Kozub, C.S. Lee, R. Lewis, P.D. Parker, A.C. Shotter, M.S. Smith, D.W. Visser, and P.J. Woods, Phys. Rev. C **63**, 065802 (2001).

251. **Determination of the Properties of the 7.08-MeV Resonance in ^{19}Ne by Measurement of the ^{1}H(^{18}F,p)^{18}F and ^{1}H(^{18}F,α)^{15}O Cross Sections with a Radioactive**

^{18}F Beam, D.W. Bardayan, J.C. Blackmon, W. Bradfield-Smith, C.R. Brune, A.E. Champagne, T. Davinson, B.A. Johnson, R.L. Kozub, C.S. Lee, R. Lewis, P.D. Parker, A.C. Shotter, M.S. Smith, D.W. Visser, and P.J. Woods, Nucl. Phys. A **688**, 475c (2001).

252. **Determination of the ^{14}O(α,p)^{17}F$_{g.s.}$ Reaction Rate by Measurement of the ^{1}H(^{17}F,α)^{14}O Cross Section,** J. C. Blackmon, D. W. Bardayan, W. Bradfield-Smith, A. E. Champagne, A. A. Chen, T. Davinson, K. I. Hahn, R. L. Kozub, Z. Ma, P. D. Parker, G. Rajbaidya, R. C. Runkle, C. M. Rowland, A. C. Shotter, M. S. Smith, K. B. Swartz, D. W. Visser, and P. J. Woods, Nucl. Phys. A **688**, 142c (2001).

253. **Kinematically complete measurement of the ^{1}H(^{18}F,p)^{18}F excitation function for the astrophysically important 7.08-MeV state in ^{19}Ne,** D.W. Bardayan, J.C. Blackmon, W. Bradfield-Smith, C.R. Brune, A.E. Champagne, T. Davinson, B.A. Johnson, R.L. Kozub, C.S. Lee, R. Lewis, P.D. Parker, A.C. Shotter, M.S. Smith, D.W. Visser, and P.J. Woods, Phys. Rev. C **62**, 042802(R) (2000).

254. **The astrophysically important 3^{+} State in ^{18}Ne and the ^{17}F(p,γ)^{18}Ne stellar rate,** D.W. Bardayan, J.C. Blackmon, C.R. Brune, A.E. Champagne, A.A. Chen, J.M. Cox, T. Davinson, V.Y. Hansper, M.A. Hofstee, B.A. Johnson, R.L. Kozub, Z. Ma, P.D. Parker, D.E. Pierce, M.T. Rabban, A.C. Shotter, M.S. Smith, K.B. Swartz, D.W. Visser, and P.J. Woods, Phys. Rev. C **62**, 055804 (2000).

255. **High resolution neutron capture and transmission measurements and the stellar neutron capture cross section of ^{88}Sr,** P.E. Koehler, R.R. Winters, K.H. Guber, T. Rauscher, J.A. Harvey, S. Raman, R.R. Spencer, J.C. Blackmon, D.C. Larson, D.W. Bardayan, and T.A. Lewis, Phys. Rev. C **62**, 055803 (2000).

256. **Observation of the Astrophysically Important 3^{+} State in ^{18}Ne via Elastic Scattering of a Radioactive ^{17}F Beam from ^{1}H**, D.W. Bardayan, J.C. Blackmon, C.R. Brune, A.E. Champagne, A.A. Chen, J.M. Cox, T. Davinson, V.Y. Hansper, M.A. Hofstee, B.A. Johnson, R.L. Kozub, Z. Ma, P.D. Parker, D.E. Pierce, M.T. Rabban, A.C. Shotter, M.S. Smith, K.B. Swartz, D.W. Visser, and P.J. Woods, Phys. Rev. Lett. **83**, 45 (1999).

257. **Nuclear Astrophysics with RIBs at Oak Ridge National Laboratory,** D.W. Bardayan, CP475, *Application of Accelerators in Research and Industry*, edited by J.L. Duggan and I.L. Morgan , AIP Press, New York (1999).

258. **Breakout from the hot CNO cycle: The ^{18}F(p,α) vs ^{18}F(p,γ) branching ratio,** S. Utku, J.G. Ross, N.P.T. Bateman, D.W. Bardayan, A.A. Chen, J. Gorres, A.J. Howard, C. Iliadis, P.D. Parker, M.S. Smith, R.B. Vogelaar, M. Wiescher, and K. Yildiz, Phys. Rev. C**57**, 2731 (1998).

259. **Thick target yield of ^{26}Al from the ^{12}C(^{16}O,x)^{26}Al$_{g.s.}$ reaction,** N.P.T. Bateman, D.W. Bardayan, Y.M. Butt, A.A. Chen, K.O. Yildiz, B.M. Young, and P.D. Parker, Phys. Rev. C**57**, 2022 (1998).

260. **High resolution neutron capture and transmission measurements on ^{137}Ba and their impact on the interpretation of meteoric barium anomalies,** P.E. Koehler, R.R. Spencer, K.H. Guber, R.R. Winters, S. Raman, J.A. Harvey, N.W. Hill, J.C. Blackmon, D.W. Bardayan, D.C. Larson, T.A. Lewis, D.E. Pierce, and M.S. Smith, Phys. Rev. C**57,** R1558 (1998).

261. **Expressions for the ^{14}O(α,p)^{17}F and ^{17}F(p,γ)^{18}Ne astrophysical reaction rates**, D.W. Bardayan and M.S. Smith, Phys. Rev. C**56**, 1647 (1997).

262. **Radioisotope yields from 1.85-GeV protons on Mo and 1.85- and 5.0- GeV protons on Te**, D.W. Bardayan, M.T.F. da Cruz, M.M. Hindi, A.F. Barghouty, Y.D. Chan, A. Garcia, R.-M. Larimer, K.T. Lesko, E.B. Norman, D.F. Rossi, F.E. Wietfeldt, and I. Zlimen, Phys. Rev. C**55**, 820 (1997).

263. **First on-line results for As and F beams from HRIBF target/ion sources**, D.W. Stracener, H.K. Carter, J. Kormicki, J.B. Breitenbach, J.C. Blackmon, M.S. Smith, and D.W. Bardayan, CP392, *Application of Accelerators in Research and Industry*, edited by J.L. Duggan and I.L. Morgan, AIP Press, New York (1997).

264. **The Production of ^{26}Al in the Early Solar System by Oxygen Rich Cosmic Rays**, N.P.T. Bateman, D.W. Bardayan, Y.M. Butt, A.A. Chen, K.O. Yildiz, B.M. Young, P.D. Parker, and A.E. Champagne, Nucl. Phys. **A621**, 60c (1997).

265. **First on-line results for As and F beams from HRIBF target/ion sources**, H.K. Carter, J. Kormicki, D.W. Stracener, J.B. Breitenbach, J.C. Blackmon, M.S. Smith, and D.W. Bardayan, Nucl. Inst. Meth. **B126**, 166 (1997).

266. **Thick-target yields of iodine isotopes from proton interactions in Te, and the double beta decays of ^{128,130}Te**, M.T.F. da Cruz, D.W. Bardayan, Y.D. Chan, A. Garcia, M.M. Hindi, R.-M. Larimer, K.T. Lesko, E.B. Norman, D.F. Rossi, R.G. Stokstad, F.E. Wietfeldt, and I. Zlimen, Phys. Rev. C**48**, 3106 (1993).

267. **β^+ decay and cosmic-ray half-life of ^{91}Nb**, M.M. Hindi, B. Sur, K.L. Wedding, D.W. Bardayan, K.R. Czerwinski, M.T.F. da Cruz, D.C. Hoffman, R.-M. Larimer, K.T. Lesko, and E.B. Norman, Phys. Rev. C**47**, 2598 (1993).

Presentations Given:

(661 total presentations authored or coauthored, 94 invited talks given)

ARUNA, D. W. Bardayan, invited talk, presented at the 2026 Nuclear Physics Community Meeting – Part II, virtual, February 2026.

ARUNA overview, D. W. Bardayan, invited talk, presented at the Low Energy Community Meeting, College Station, TX, August 2025.

Constraining Astrophysical Nucleosynthesis with Nuclear Measurements in the Physics Laboratory, D. W. Bardayan, invited talks, presented at the Nuclear Physics from Multi-Messenger Mergers (NP3M) summer school, Bloomington, IN, June 2025.

First measurements with the Enge split-pole spectrometer at the Notre Dame Nuclear Science Lab (NSL), D. W. Bardayan et al., presented at the Conference on the Application of Accelerators to Research and Industry, Fort Worth, TX, July 2024.

Study of the ^{17}F(d,n)^{18}Ne reaction to constrain the rate of ^{17}F(p,γ)^{18}Ne in novae, D. w. Bardayan et al., presented at the International Conference on Direct Reactions with Exotic Beams (DREB), Weisbaden, Germany, June 2024.

Nuclear Astrophysics at the Notre Dame Nuclear Science Lab, D. W. Bardayan, invited talk, presented at the first IANNA-IRENA workshop, Notre Dame, IN June 2024

Tips for writing a successful research proposal, D. W. Bardayan, invited talk, presented at the CENAM Frontiers Junior Scientist Workshop, Notre Dame, IN June 2024

Nuclear astrophysics at the Notre Dame Nuclear Science Lab, D. W. Bardayan, invited talk, presented at a meeting of the Notre Dame Student Union Board, Notre Dame, IN, April 2024.

Nuclear Astrophysics at the Notre Dame Nuclear Science Lab, D. W. Bardayan, invited talk, presented at Nuclei in the Cosmos, Daejeon, South Korea, September 2023.

The ^{17}F(p,γ)^{18}Ne rate of importance to ^{18}F diagnostics of nova nucleosynthesis, D. W. Bardayan, invited talk, presented at the International Symposium on Nuclear Physics and Astrophysics, Antalya, Turkey, September 2023.

New capabilities at the Notre Dame Nuclear Science Lab, D. W. Bardayan, invited talk, presented at the Annual Low-Energy Community Meeting, East Lansing, MI, August 2023.

Instrumentation Plans at the Notre Dame Nuclear Science Laboratory, D. W. Bardayan, invited talk, presented at the Nuclear Structure and Astrophysics Town Hall Meeting, Argonne, IL, November 2022.

New Tools for Explosive Nucleosynthesis Studies at the Notre Dame Nuclear Science Lab (NSL), D. W. Bardayan et al., presented at the Conference on the Application of Accelerators to Research and Industry, Denton, TX, November 2022.

New Tools for Explosive Nucleosynthesis Studies at the Notre Dame Nuclear Science Lab (NSL), D. W. Bardayan et al., presented at the annual meeting of the Division of Nuclear Physics, New Orleans, LA, October 2022.

The history and science of the Notre Dame Nuclear Science Laboratory, D. W. Bardayan, invited presentation, presented at a Nuclear Science Laboratory Open House, Notre Dame, IN, October 2022.

SSNAPD: Solenoid Spectrometer for Nuclear Astrophysics and Decays, D. W. Bardayan *et al*., invited talk, presented at the Annual Low Energy Community Meeting, Argonne, IL, August 2022.

Recent measurements with the Rhinoceros gas target at Notre Dame, D. W. Bardayan *et al*., presented at the April Meeting of the American Physical Society, New York, NY, April 2022.

State of the NSL, D. W. Bardayan, invited talk, presented at the Nuclear Science Laboratory nuclear seminar, Notre Dame, IN, September 2021.

Explosive hydrogen burning probed with measurements using exotic beams, D. W. Bardayan, invited seminar, presented to the Korean Physical Society C2R2 seminar series, virtual, March 2021.

Explosive hydrogen burning probed with measurements using exotic beams, D. W. Bardayan, invited plenary talk, presented at the XLIII Brazilian Workshop on Nuclear Physics (RTFNB), virtual, December 2020.

Nuclear astrophysics experiments at the University of Notre Dame, D. W. Bardayan, invited talk, presented at the Nuclear Astrophysics breakout session at the Low Energy Community Meeting, virtual, August 2020.

The ^{25}Al(p,γ)^{26}Si Reaction, D. W. Bardayan, invited talk, presented at the Workshop on Progress on the reaction rates and stellar modelling affecting the ^{26}Al abundance in the Galaxy, York, United Kingdom, March 2020.

Measuring Ne-19 alpha-branching ratios with the JENSA gas-jet target, D. W. Bardayan *et al.*, presented at the annual Division of Nuclear Physics Meeting, Crystal City, VA, October 2019.

Nuclear Astrophysics Experiments, D. W. Bardayan, invited lectures, presented at the Exotic Beam Summer School, Oak Ridge, TN, June 2019.

Installation of the ORNL Enge Spectrometer at Notre Dame, invited talk, presented at the workshop on Science With The Super-Enge Split-Pole Spectrograph And Workshop On Transfer Reactions, Tallahassee, FL, March 2019.

Particle (and γ) decay of astrophysically-important ^{19}Ne States, D. W. Bardayan, invited talk, presented at the 42nd Symposium on Nuclear Physics, Cocoyoc, Mexico, January 2019.

Installation of an Enge Split-Pole Spectrograph at Notre Dame, D. W. Bardayan et al., presented at the Fall Meeting of the Division of Nuclear Physics, Waikoloa, HI, October 2018.

Spectroscopic strengths of low-lying levels in ^{18}Ne, D. W. Bardayan et al., invited talk, presented at the Conference on the Application of Accelerators to Research and Industry, Grapevine, TX, August 2018.

Transfer of the Oak Ridge Enge Split-Pole Spectrograph to Notre Dame, D. W. Bardayan et al., presented at the Conference on the Application of Accelerators to Research and Industry, Grapevine, TX, August 2018.

Probing explosive nucleosynthesis through TwinSol Measurements, D. W. Bardayan, invited talk, presented at the Conference on the Intersection of Particle and Nuclear Physics, Palm Springs, CA, May 2018.

Transfer of the Oak Ridge Enge Split-Pole Spectrograph to Notre Dame, D. W. Bardayan et al., presented at the JINA Frontiers Meeting, South Bend, IN, May 2018.

Current Research Activities at the Nuclear Science Laboratory, D. W. Bardayan, invited talk, presented at the 80th Anniversary Celebration of the Notre Dame Nuclear Science Laboratory, Notre Dame, IN, April 2018.

Nuclear Astrophysics Measurements with the NIFFTE Time Project Chamber, D. W. Bardayan, invited talk, presented at the Workshop on Future Applications of the Fission Time Projection Chamber, Livermore, CA, March 2018.

The Notre Dame Nuclear Science Laboratory, D. W. Bardayan, invited plenary talk, presented at the 2017 Low Energy Community Meeting, Argonne, IL, August 2017.

Measurements of (d,n) reactions of astrophysical interest using SECAR, D. W. Bardayan, invited talk, presented at the 2017 Low Energy Community Meeting, Argonne, IL, August 2017.

Recent Upgrades to TwinSol, D. W. Bardayan et al., presented at the international conference on Advances in Radioisotope Science ARIS2017, Keystone, CO, May 2017.

Proton transfer reactions on exotic beams to probe nucleosynthesis, D. W. Bardayan, invited talk, presented at the Institute of Nuclear Theory Workshop – Nuclear Reactions: A symbiosis between experiment, theory, and applications, Seattle, WA, March 2017.

Determining the ^{14}O(α,p)^{17}F astrophysical rate with TwinSol measurements, presented at the Conference on the Application of Accelerators to Research and Industry (CAARI), Ft. Worth, TX, November 2016.

Study of the ^{17}F(p,α)^{14}O reaction at TwinSol, D. W. Bardayan et al., presented at the Fall Meeting of the Division of Nuclear Physics, Vancouver, CA, October 2016.

Astrophysical studies with radioactive ^{17}F beams at TwinSol, D. W. Bardayan, invited talk, presented at an NSCL Nuclear Science Seminar, Michigan State University, East Lansing, MI, September 2016.

Relocation of the Holifield Enge Spectrograph to the Notre Dame Nuclear Science Lab, D. W. Bardayan, invited talk, presented at the 2016 Low Energy Community Meeting, Notre Dame, IN, August 2016.

The first science results with the JENSA gas-jet target, D. W. Bardayan, invited talk, presented at the 2016 Low Energy Community Meeting, Notre Dame, IN, August 2016.

Measuring (d,n) reactions of astrophysical interest using the JENSA gas-jet target, D. W. Bardayan, invited talk, presented at the Annual Retreat of the SSAA for Radioactive Ion Beam Studies in Stewardship Science, Knoxville, TN, June 2016.

Recent study of the ^{14}O(α,p)^{17}F reaction using TwinSol radioactive beams, D. W. Bardayan, presented at the JINA-CEE Satellite Workshop on Experiments for X-Ray Burst Nucleosynthesis, Athens, OH, May 2016.

Nuclear astrophysics at the Notre Dame Nuclear Science Laboratory, D. W. Bardayan, invited talk, presented at a University of Kentucky Nuclear Physics Seminar, Lexington, KY, March 2016.

Nuclear astrophysics measurements with the TwinSol Radioactive Beam Facility, D. W. Bardayan, invited talk, presented at the 39th Symposium on Nuclear Physics, Cocoyoc, Mexico, January 2016.

The center of excellence for radioactive ion beam studies for stewardship science, D. W. Bardayan, invited talk, presented at the LANSCE User Group Meeting – LANSCE Futures, Santa Fe, NM, November 2015.

Astrophysical neutron capture rates from HRIBF transfer reaction measurements on radioactive nuclei, D. W. Bardayan, invited talk, presented at the workshop on Galactic evolution, Nuclear Astrophysics and Stellar Hydrodynamics (GNASH), Victoria, CA, May 2015.

The new JENSA gas-jet target for astrophysical radioactive beam experiments, D. W. Bardayan *et al*., presented at the International Conference on Electromagnetic Isotope Separators and Related Topics (EMIS 2015), Grand Rapids, MI, May 2015.

Nova nucleosynthesis and production of the radioisotope ^{18}F, D. W. Bardayan, invited talk, presented at a Argonne Physics Division Seminar, Argonne, IL, March 2015.

Explosive hydrogen burning nucleosynthesis and future experiments, D. W. Bardayan, invited plenary talk, presented at the 38th Symposium on Nuclear Physics, Cocoyoc, Mexico, January 2015.

Nuclear physics challenges and opportunities for nova nucleosynthesis, D. W. Bardayan, invited talk, presented at the 2014 Meeting of the Southeastern Section of the American Physical Society, Columbia, SC, November 2014.

^{19}Ne states studied with the new JENSA gas jet target, D. W. Bardayan *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Waikoloa, HI, October 2014.

Overview of Nuclear Astrophysics, D. W. Bardayan, invited plenary talk, presented at the International Conference on the Application of Accelerators to Research and Industry, San Antonio, TX, May 2014.

The JENSA gas-jet target for astrophysical measurements at ReA3 and FRIB, D. W. Bardayan *et al*.**,** presented at the International Conference on the Application of Accelerators to Research and Industry, San Antonio, TX, May 2014.

Direct reaction measurements of astrophysical interest using the JENSA gas-jet target, D. W. Bardayan, invited talk, presented the Workshop on Nuclear Symmetries and Stewardship Science, Berkeley, CA May 2014.

Measurements of interest to ^{18}F nucleosynthesis with the JENSA gas-jet target, D. W. Bardayan *et al*., presented at the Fall Meeting of the DNP, Newport News, VA, October 2013.

ORNL Nuclear Structure and Astrophysics, D. W. Bardayan, invited talk, presented at the Comparative Review of Department of Energy Low Energy Nuclear Physics programs, Gaithersburg, MD, May 2013.

Gamma-ray vision of novae and exotic nuclei, D. W. Bardayan, invited talk, presented at a University of Notre Dame Departmental Colloquium, South Bend, IN, April 2013.

Proton-transfer studies of astrophysically-interesting nuclei using the JENSA gas-jet target, D. W. Bardayan *et al*., presented at the Fall Meeting of the American Physical Society, Newport Beach, CA, October 2012.

Nuclear astrophysics measurements at FRIB, D. W. Bardayan, invited talk, presented at the Nuclear Astrophysics Town Meeting 2012, Detroit, MI, October 2012.

Astrophysics measurements with gas targets and radioactive beams at HRIBF, D. W. Bardayan, invited talk, presented at a University of Notre Dame Nuclear Seminar, Notre Dame, IN, September 2012.

Studies of r-process nuclei using transfer reactions at the HRIBF, D. W. Bardayan, invited talk, presented at the SKKU International Symposium on Astrophysics and Cosmology: from Particle to Universe, Sungkyunkwan University, Suwon, Korea, August 2012.

Astrophysics measurements with gas targets and radioactive beams at HRIBF, D. W. Bardayan, invited talk, presented at a Chung-Ang University Physics Colloquium, Seoul, Korea, August 2012.

The new SuperORRUBA Array for Transfer Reaction Studies of Exotic Nuclei, D. W. Bardayan *et al.*, presented at the XII International Symposium on Nuclei in the Cosmos, Cairns, Australia, August 2012.

Plans for the JENSA gas-jet target at the NSCL, D. W. Bardayan, invited talk, presented at the Center of Excellence for Radioactive Ion Beam Science retreat, Knoxville, TN, June 2012.

HRIBF studies of r-process nuclei and first results with the new SuperORRUBA Array, D. W. Bardayan *et al.*, presented at the 2012 Conference on the Intersections of Particle and Nuclear Physics International Conference, St. Petersburg, FL, June 2012.

New instruments and recent results in the study of transfer reactions at the HRIBF, D. W. Bardayan, invited talk, presented at a Texas A&M Cyclotron Institute Colloquium, College Station, TX, May 2012.

Astrophysics measurements with gas targets and radioactive beams at HRIBF, D. W. Bardayan, invited talk, presented at an Ohio University Nuclear Astrophysics Seminar, Athens, OH, May 2012.

Recreating astrophysical explosions with combustible gases in the laboratory, D. W. Bardayan, invited talk, presented at a Colorado School of Mines Physics Department Colloquium, Golden, CO, April 2012.

Astrophysics measurements with gas targets and radioactive beams at HRIBF, D. W. Bardayan, invited talk, presented at a NSCL Nuclear Physics Seminar, East Lansing, MI, November 2011.

Nuclear astrophysics at the Holifield Radioactive Ion Beam Facility, D. W. Bardayan, invited talk, presented at a University of Tennessee Graduate Research Participation Seminar, Knoxville, TN, September 2011.

Nuclear astrophysics plans at HRIBF and the JENSA gas target project, D. W. Bardayan, invited talk, presented at the Joint ATLAS-HRIBF-NSCL-FRIB Users Meeting, East Lansing, MI, August 2011.

Transfer reactions on unstable nuclei for nuclear science applications, D. W. Bardayan, invited talk, presented at the Applications of Nuclear Science and Technology Exchange Meeting, Rockford, MD, August 2011.

JENSA: Jet experiments in nuclear structure and astrophysics, D. W. Bardayan et al., invited talk, presented at the Center of Excellence for Radioactive Ion Beam Science retreat, Oak Ridge, TN, June 2011.

Experiments in the vicinity of ^{132}Sn, D. W. Bardayan, invited talk, presented at the ECT* workshop on Transfer and Knockout Reactions, Trento, Italy, May 2011.

Development and first tests of the SuperORRUBA Silicon Detector Array, D. W. Bardayan *et al*., presented at the Spring Meeting of the American Physical Society, Anaheim, CA, April 2011.

Gas-jet plans at the HRIBF, D. W. Bardayan, invited talk, presented at a JENSA Collaboration Meeting, Golden, CO, March 2011.

The superORRUBA detector array, D. W. Bardayan *et al*., invited talk, presented at the Workshop on Advances in Nuclear Radiation Detectors and Technologies, New Brunwick, NJ, January 2011.

Recent experiments related to explosive nuclear burning, D. W. Bardayan, invited talk, presented at the Division of Nuclear Physics Meeting, Sante Fe, NM, November 2010.

Studies of ^{27}Si and the ^{26}Al(p,γ)^{27}Si reaction rate, D. W. Bardayan *et al*., presented at Nuclear Structure 2010, Berkeley, CA, August 2010.

Direct Measurements of (p, γ) cross sections at astrophysical energies using radioactive beams and the Daresbury Recoil Separator, D. W. Bardayan *et al*., presented at the 11th Symposium on Nuclei in the Cosmos, Heidelberg, Germany, July 2010.

Studies of the ^{18}F(p,α)^{15}O reaction at ORNL, D. W. Bardayan, invited talk, presented at a nuclear physics seminar at the University of Huelva, Huelva, Spain, June 2010.

Direct measurements of proton capture reactions on radioactive beams at the HRIBF, D. W. Bardayan, invited talk, presented at the 4th LACM-EFES-JUSTIPEN Workshop, Oak Ridge, TN, March 2010.

Studies of the ^{18}F(p,α)^{15}O reaction at ORNL, D. W. Bardayan, invited talk, presented at the IoP Workshop on Nuclear Astrophysics in Novae and X-ray Bursts, York, U.K., February 2010.

Transfer reaction studies of r-process nuclei at ORNL, D. W. Bardayan, invited talk, presented at a York University Physics Seminar, York, U.K., February 2010.

Challenges and recent results on the structure of r-process nuclei, D. W. Bardayan, invited talk, presented at the 76th Annual Meeting of the Southeastern Section of the APS, Atlanta, GA, November 2009.

Development of a new silicon detector barrel array, D. W. Bardayan, invited talk, presented at the HRIBF Users Meeting: Upgrade for the FRIB ERA, Oak Ridge, TN, November 2009.

Astrophysical measurements with radioactive ^{17}F beams at HRIBF, D. W. Bardayan *et al*., presented at the 3rd Joint Meeting of the APS Division of Nuclear Physics and the Physical Society of Japan, Waikoloa, HI, October 2009.

The ^{28}Si(p,t)^{26}Si reaction and implications for ^{25}Al(p,□)^{26}Si, K. A. Chipps *et al*., presented at the 3rd Joint Meeting of the APS Division of Nuclear Physics and the Physical Society of Japan, Waikoloa, HI, October 2009.

Nuclear Astrophysics Measurements with Exotic Beams Part 1, D. W. Bardayan, invited talk, presented at the Exotic Beam Summer School, Berkeley, CA, August 2009.

Nuclear Astrophysics Measurements with Exotic Beams Part 2, D. W. Bardayan, invited talk, presented at the Exotic Beam Summer School, Berkeley, CA, August 2009.

Studies of ^{26}Al+p reactions at HRIBF, D. W. Bardayan, invited talk, presented at the 2009 Meeting of the HRIBF Program Advisory Committee, Oak Ridge, TN July 2009.

The study of (d,p) reactions near ^{132}Sn at HRIBF, D. W. Bardayan, invited talk, presented at the Gordon Research Conference on Nuclear Chemistry, New London, NH, June 2009.

Astrophysical studies of (p,γ) reactions on radioactive beams at ORNL, D. W. Bardayan, invited talk, presented at a Nuclear Astrophysics Seminar, Rutgers University, New Brunswick, NJ, June 2009.

The SIDAR Silicon Detector Array: A decade of discovery, D. W. Bardayan *et al*., presented at the 8th International Conference on Radioactive Nuclear Beams (RNB8), Grand Rapids, MI, May 2009.

Measurements with rare isotope beams for nuclear astrophysics, D. W. Bardayan, invited talk, presented at the 237th American Chemical Society National Meeting, Salt Lake City, UT, March 2009.

Neutron transfer measurements around ^{132}Sn, S. D. Pain *et al*., invited talk, presented at the 237th American Chemical Society National Meeting, Salt Lake City, UT, March 2009.

Direct measurements of proton-capture cross sections using radioactive beams and the Daresbury Recoil Separator, D. W. Bardayan, invited talk, presented at a University of Tennessee Nuclear Physics Seminar, Knoxville, TN, November 2008.

Studying nova explosions with precision spectroscopy measurements and radioactive beams, D. W. Bardayan, presented at the 20th Annual Kavli Frontiers of Science Symposium, Irvine, CA, November 2008.

Direct measurements of (p,γ) cross sections at astrophysical energies using radioactive beams and the Daresbury Recoil Separator, D. W. Bardayan *et al*., presented at the Zakopane Conference on Nuclear Physics, Zakopane, Poland, September 2008.

Direct measurements of (p,γ) cross sections at astrophysical energies using radioactive beams and the Daresbury Recoil Separator, D. W. Bardayan *et al*., presented at the 5th International Conference on Exotic Nuclei and Atomic Masses, Ryn, Poland, September 2008.

Elemental discrimination of low-energy ions using risetime analysis of silicon-strip detector signals, D. W. Bardayan *et al*., presented at the 20th International Conference on the Application of Accelerators in Research & Industry, Fort Worth, TX, August 2008.

New Measurements of spectroscopic factors for low-lying ^{16}N levels, D. W. Bardayan *et al*., invited talk, presented at the 20th International Conference on the Application of Accelerators in Research & Industry, Fort Worth, TX, August 2008.

Neutron-spectroscopic factors for low-lying ^{16}N levels and the ^{15}N(n,γ)^{16}N reaction rate, D. W. Bardayan *et al*., presented at the 10th Symposium on Nuclei in the Cosmos, Mackinac Island, MI, July 2008.

Studies of (d,p) reactions on radioactive beams at HRIBF, D. W. Bardayan, invited talk, presented as an Argonne National Laboratory Physics Division Seminar, Argonne, IL, March 2008.

Spectroscopic factors for low-lying ^{16}N levels, D. W. Bardayan *et al*., invited talk, presented at Fourth International Conference on Fission and Properties of Neutron-rich Nuclei, Sanibel Island, FL, November 2007.

^{30,31}S level structure measured via (p,t) and (p,d) reactions on ^{32}S, D. W. Bardayan, presented at the Division of Nuclear Physics Meeting (DNP), Newport News, VA, October 2007.

Radioactive ion beams and gamma-ray vision of novae, D. W. Bardayan, invited talk, presented at a University of Tennessee Physics Department Colloquium, Knoxville, TN, September 2007.

Studies of reactions affecting ^{18}F production in novae, D. W. Bardayan for the RIBENS Collaboration, presented at the conference on Nuclear Astrophysics Beyond the First 50 Years, Pasadena, CA, July 2007.

^{26}Si and ^{30}S studied via (p,t) reactions using the Silicon Detector Array (SIDAR), D. W. Bardayan et al., presented at the April Meeting of the American Physical Society, Jacksonville, FL, April 2007.

The ^{25}Al(p,γ)^{26}Si Reaction Rate in Novae, D. W. Bardayan *et al*., presented at the HRIBF Workshop on Nuclear Measurements for Astrophysics, Oak Ridge, TN, October 2006.

The ^{25}Al(p,γ)^{26}Si Reaction Rate in Novae, D. W. Bardayan *et al*., presented at Nuclear Structure 2006, Oak Ridge, TN, July 2006.

Recent Astrophysical Results using Exotic Beams at ORNL, D. W. Bardayan, invited talk, presented at the 2006 Canadian Association of Physicists Congress, St. Catherines, Ontario, June 2006.

The ^{25}Al(p,γ)^{26}Si Reaction Rate in Novae, D. W. Bardayan *et al*., presented at Nuclei in the Cosmos 9, Geneva, Switzerland, June 2006.

Measurements with ^{7}Be Beams at the HRIBF, D. W. Bardayan *et al*., presented at the Division of Nuclear Physics Meeting (DNP), Maui, Hawaii, September 2005.

Recent Astrophysical Studies with Exotic Beams at ORNL, D. W. Bardayan, invited talk, presented at Nuclear Physics in Astrophysics – II, Debrecen, Hungary, May 2005.

^{19}F alpha widths from the ^{15}N(α,α)^{15}N reaction and the ^{18}F+p reaction rates, D. W. Bardayan *et al.*, presented at the April Meeting of the American Physical Society, Tampa, FL, April 2005.

New ^{19}Ne Resonance Observed with a Thick Target ^{18}F(p,p)^{18}F Measurement, D. W. Bardayan *et al*., presented at the Division of Nuclear Physics (DNP) meeting, Chicago, IL, October 2004.

New ^{19}Ne Resonance Observed Using an Exotic ^{18}F Beam, D. W. Bardayan *et al*., presented at the Conference on Exotic Nuclei and Masses (ENAM04), Pine Mountain, GA, September 2004.

New ^{19}Ne Level Observed with a Thick Target ^{18}F(p,p)^{18}F Measurement, D. W. Bardayan *et al*., presented at Nuclei in the Cosmos, Vancouver, B.C., Canada, July 2004.

Nova Nucleosynthesis of Gamma-Ray Emitters and Radioactive Beam Measurements, D. W. Bardayan, invited talk, presented at the April Meeting of the American Physical Society, Denver, CO, May 2004.

(d,p) Reactions on Exotic Beams, D. W. Bardayan, invited talk, presented at the EMMA workshop: An Electromagnetic Mass Analyzer for ISAC II, TRIUMF, Vancouver, B. C., Canada, December 2003.

Studies of the ^{18}F(p,α)^{15}O Reaction Rate with a ^{18}F Beam at the HRIBF, D. W. Bardayan *et al*., presented at the 6th International Conference on Radioactive Nuclear Beams, Argonne, IL, September 2003.

Studies in Nuclear Astrophysics Using Radioactive Beams at the HRIBF, D. W. Bardayan, invited talk, presented at the V Latinamerican Symposium on Nuclear Physics, Santos, Brazil, September 2003.

Explosive Nucleosynthesis Measurements with Radioactive Fluorine Beams at the ORNL HRIBF, D. W. Bardayan, invited talk, presented at the Conference on Direct Reactions with Exotic Beams (DREB03), Guildford, United Kingdom, July 2003.

The single-particle structure of neutron-rich nuclei of astrophysical interest at the ORNL HRIBF, D. W. Bardayan *et al*., invited talk, presented at the Third International Conference on Fission and Properties of Neutron-Rich Nuclei, Sanibel Island, FL, November 2002.

Nuclear Astrophysics Studies using the Daresbury Recoil Separator at the ORNL Holifield Radioactive Ion Beam Facility, D. W. Bardayan, invited talk, presented at the Big DRAGON workshop: A Recoil Separator for ISAC II at TRIUMF, Vancouver, Canada, July 2002.

Study of ^{26}Si States Important for ^{26}Al Nucleosynthesis in Novae, D. W. Bardayan *et al*., presented at the 7th International Symposium on Nuclei in the Cosmos, Fuji-Yoshida, Japan, July 2002.

Measurement of the ^{18}F(p,α)^{15}O Cross Section at Nova Energies, D. W. Bardayan *et al*., presented at the 7th International Symposium on Nuclei in the Cosmos, Fuji-Yoshida, Japan, July 2002.

Direct Study of the ^{18}F(p,α)^{15}O Reaction at Energies Relevant for ^{18}F Nucleosynthesis in Novae, D. W. Bardayan *et al*., presented at the International Conference on Classical Nova Explosions, Sitges, Spain, May 2002.

Measurement of the strength of the ^{18}F(p,α)^{15}O resonance at $E_{c.m.}$=330 keV, D. W. Bardayan *et al*., contributed talk, presented at the APS April Meeting, Albuquerque, N.M., April 2002.

Recent Results in Nuclear Astrophysics Using Radioactive Fluorine Beams at the HRIBF, D. W. Bardayan for the RIBENS collaboration, presented at the International Nuclear Physics Conference (INPC 2001), Berkeley, CA, July 2001.

Explosive ^{17}F(p,γ)^{18}Ne Burning through the 3$^+$ State in ^{18}Ne, D. W. Bardayan, invited talk, presented at the APS April Meeting, Washington D.C., April 2001.

Determining Radioisotope Production in Novae from Laboratory Measurements made at the ORNL HRIBF, D. W. Bardayan, invited talk, presented at an Astrophysics Seminar, University of Tennessee, Knoxville, TN, April 2001.

Determination of the ^{18}F(p,α)^{15}O stellar reaction rate, D. W. Bardayan *et al*., presented at the ISOL01 conference, Oak Ridge, TN, March 2001.

SIDAR: A silicon detector array for astrophysics studies with radioactive beams, D. W. Bardayan *et al*., presented at the ISOL01 conference, Oak Ridge, TN, March 2001.

Determining Radioisotope Production in Novae from Laboratory Measurements made at the ORNL HRIBF, D. W. Bardayan, invited talk, presented at a TRIUMF seminar, TRIUMF, Vancouver, BC, February 2001.

Determining Radioisotope Production in Novae from Laboratory Measurements made at the ORNL HRIBF, D. W. Bardayan, invited talk, presented at a Physics Colloquium, Ohio University, Athens, OH, January 2001.

Determining Radioisotope Production in Novae from Laboratory Measurements, D. W. Bardayan, invited talk, presented at a RIB section seminar, Oak Ridge National Laboratory, Oak Ridge, TN, November 2000.

Measurements of the ^{1}H(^{18}F,p)^{18}F and ^{1}H(^{18}F,α)^{15}O Excitation Functions at the HRIBF, D. W. Bardayan *et al*., contributed talk, presented at the DNP meeting, Williamsburg, VA, October 2000.

Determination of the Properties of the 7.08 MeV Resonance in ^{19}Ne by Measurement of the ^{1}H(^{18}F,p)^{18}F and ^{1}H(^{18}F,α)^{15}O Cross Sections with a Radioactive ^{18}F Beam, D.W. Bardayan *et al*., presented at Nuclei in the Cosmos 2000, Aarhus, Denmark, June 2000.

Nuclear Astrophysics Measurements with Radioactive Ion Beams at the HRIBF, D.W. Bardayan, invited talk, presented at a TUNL Seminar, Triangle Universities Nuclear Laboratory, Durham, NC, February 2000.

^{17}F+p Elastic Scattering, D.W. Bardayan, invited talk, presented at the Second Biennial Workshop on "Nuclear Structure Physics Near the Coulomb Barrier: Into the 21st Century", Yale University, New Haven, CT, June 1999.

^{17}F(p,γ)^{18}Ne Burning in Stellar Explosions, D.W. Bardayan, invited talk, presented at a Physics Seminar, Tennessee Technological University, Cookeville, TN, April 1999.

Study of Astrophysically Important States in ^{18}Ne Via ^{17}F(p,p)^{17}F at the HRIBF, D.W. Bardayan, invited talk, presented at a Physics Division Lunch Seminar, Oak Ridge National Laboratory, Oak Ridge, TN, April 1999.

Measurement of the ^{1}H(^{17}F,p)^{17}F Excitation Function at the HRIBF, D.W. Bardayan *et al*., contributed talk, presented at the APS Centennial Meeting, Atlanta, GA, March 1999.

Nuclear Astrophysics with Radioactive Ion Beams at Oak Ridge National Laboratory, D.W. Bardayan, invited talk, presented at WNSL, Yale University, New Haven, CT, November 1998.

Nuclear Astrophysics with RIBS at ORNL, D.W. Bardayan, invited talk, presented at the 15th Annual Conference on Application of Accelerators in Research and Industry, Denton, TX, November 1998.

Initial Reaction Study Results with the Daresbury Recoil Separator at ORNL, D.W. Bardayan *et al*., contributed talk, presented at the APS April Meeting, Columbus, OH, April 1998.

First RIB Experiments, Detector Systems, and Rate Evaluations, D.W. Bardayan, presented at a Physics Division Information Meeting, Oak Ridge National Laboratory, April 1997.

Radioisotope Yields from 1.85-GeV Protons on Mo and 1.85- and 5.0-GeV Protons on Te, D.W. Bardayan *et al*., presented at the 24th International Cosmic Ray Conference, Rome, Italy, September 1995.

A Monte Carlo Simulation of the Electron Capture Decay of ^{37}Ar with an Admixture of Massive Neutrinos, D.W. Bardayan *et al*., contributed talk, presented at the SPS meeting at SESAPS, Oak Ridge, TN, November 1992.

Presentations Co-authored:

Nuclear reactions to decode γ-ray observations from core collapse supernovae, M. Abubakar *et al*., presented at the Annual Meeting of the Division of Nuclear Physics, Chicago, IL, October 2025.

Measuring the ^{18}F(α,p)^{21}Ne excitation function with a new ANASEN design, K. Davis *et al*., presented at the Annual Meeting of the Division of Nuclear Physics, Chicago, IL, October 2025.

The solenoid spectrometer for nuclear astrophysics and decays: a new tool for the indirect measurement of astrophysical capture reactions, C. Demski *et al*., presented at the Annual Meeting of the Division of Nuclear Physics, Chicago, IL, October 2025.

The ^{14}O(α,p)^{17}F reaction rate and type I x-ray bursts, J. C. Blackmon *et al*., presented at the Annual Meeting of the Division of Nuclear Physics, Chicago, IL, October 2025.

Low-spin structure of ^{58}Cu and its impact on the ^{57}NI(p,γ)^{58}Cu reaction in the vp process, S. Byrne *et al*., presented at the Annual Meeting of the Division of Nuclear Physics, Chicago, IL, October 2025.

Experimental constraints to the ^{57}Ni(p,γ)^{58}Cu reaction rate, S. Carmichael *et al*., presented at the Annual Meeting of the Division of Nuclear Physics, Chicago, IL, October 2025.

^{15}N(α,γ)^{19}F measurements with the Rhinoceros Gas Target to determine level properties of ^{19}F in the Ex = 7.0-7.3 region, W. Sutton *et al*., presented at the Annual Meeting of the Division of Nuclear Physics, Chicago, IL, October 2025.

Improvements to ATHENA for the total cross section measurement of ^{15}O(α,p)^{18}F, W. W. von Seeger *et al*., presented at the Annual Meeting of the Division of Nuclear Physics, Chicago, IL, October 2025.

Probing ^{40}Sc level structure to constrain the ^{39}Ca(p,γ)^{40}Sc for x-ray burst, M. Zubair *et al*., presented at the Annual Meeting of the Division of Nuclear Physics, Chicago, IL, October 2025.

Improved measurements of (α,p) reactions with a new ANASEN design, K. Davis et al., presented at the Annual Meeting of the Division of Nuclear Physics, Boston, MA, October 2024.

An update on the St. Benedict ion-trapping system, F. Rivero et al., presented at the Annual Meeting of the Division of Nuclear Physics, Boston, MA, October 2024.

Investigation of the ^{57}Ni(p,γ)^{58}Cu reaction in the vp process, S. Byrne et al., presented at the Annual Meeting of the Division of Nuclear Physics, Boston, MA, October 2024.

Commissioning and Simulation of the St. Benedict Extraction Beamline, D. Schroeder et al., presented at the Annual Meeting of the Division of Nuclear Physics, Boston, MA, October 2024.

^{58}Ni(^{3}He,t)^{58}Cu Measurements to Constrain the Astrophysical Rate of ^{57}Ni(p,γ) ^{58}Cu, S. Carmichael et al., presented at the Annual Meeting of the Division of Nuclear Physics, Boston, MA, October 2024.

^{58}Ni(^{3}He,t)^{58}Cu Measurements to Constrain the Astrophysical Rate of ^{57}Ni(p,γ) ^{58}Cu, S. Carmichael et al., presented at the Conference on Nuclear Structure, Argonne, IL, June 2024.

^{58}Ni(^{3}He,t)^{58}Cu Measurements to Constrain the Astrophysical Rate of ^{57}Ni(p,γ) ^{58}Cu, S. Carmichael et al., presented at the CENAM Frontiers Meeting, Notre Dame, IN, June 2024.

^{20}Ne(α,p)^{23}Na cross section studied for constraint of supernova type Ia nucleosynthesis, C. Boomershine et al., presented at the CENAM Frontiers Meeting, Notre Dame, IN, June 2024.

Elastic scattering of ^{8}B+^{90}Zr at sub-barrier energies, K. Palli et al., presented at HNPS Advances in Nuclear Physics, Ioannina, Greece, May 2024.

The Enge Split-Pole Spectrograph at the University of Notre Dame, P. D. O'Malley et al., presented at HNPS Advances in Nuclear Physics, Ioannina, Greece, May 2024.

Stopped RIBs for St. Benedict at Notre Dame, M. Brodeur *et al*., presented at the annual meeting of the Division of Nuclear Physics, Waikoloa, Hawaii, November 2023.

The ^{13}C(α, n)^{16}O differential cross section, R. J. deBoer *et al*., presented at the annual meeting of the Division of Nuclear Physics, Waikoloa, Hawaii, November 2023.

The ^{20}Ne(α,p)^{23}Na cross section studied to constrain supernova type 1a nucleosynthesis, C. Boomershine *et al*., presented at the annual meeting of the Division of Nuclear Physics, Waikoloa, Hawaii, November 2023.

Complete analysis of ^{19}F energy levels in 2021 experiment of the ^{15}N(α,γ)^{19}F reaction, M. Shimba *et al*., presented at the annual meeting of the Division of Nuclear Physics, Waikoloa, Hawaii, November 2023.

Beta-neutrino angular correlation measurements for mixed mirror nuclei with St. Benedict, R. Zite *et al*., presented at the annual meeting of the Division of Nuclear Physics, Waikoloa, Hawaii, November 2023.

^{58}Ni(^{3}He,t)^{58}Cu*(γ) measurements with GODDESS to constrain the astrophysical rate of ^{57}Ni(p,γ)^{58}Cu, S. Carmichael *et al*., presented at the annual meeting of the Division of Nuclear Physics, Waikoloa, Hawaii, November 2023.

Total cross section measurement of ^{14}O(α,p)^{17}F with an active target ionization chamber, W. von Seeger *et al*., presented at the annual meeting of the Division of Nuclear Physics, Waikoloa, Hawaii, November 2023.

Measurement and analysis of the ^{17}F(p,p') reaction, S. Coil *et al*., presented at the annual meeting of the Division of Nuclear Physics, Waikoloa, Hawaii, November 2023.

Development of the Solenoid Spectrometer for Nuclear Astrophysics and Decays (SSNAPD), C.Dembski *et al*., presented at the annual meeting of the Division of Nuclear Physics, Waikoloa, Hawaii, November 2023.

Commissioning of the neutron irradiation station at the University of Notre Dame, M. Matney *et al*., presented at the annual meeting of the Division of Nuclear Physics, Waikoloa, Hawaii, November 2023.

Constraining the ^{30}P(p,γ)^{31}S reaction using ^{30}P(d,pγ)^{31}P with GODDESS, R. Ghimire *et al*., presented at the annual meeting of the Division of Nuclear Physics, Waikoloa, Hawaii, November 2023.

GADGET - a Gaseous Detector with Germanium Tagging, M. Friedman *et al*., presented at the 7th International Conference on Micro Pattern Gaseous Detectors (MPGD21), Rehevot, Israel, November 2022.

ONe Nova Nucleosynthesis Studies Using ^{31}Cl β-Delayed Proton Decay, T. Budner *et al.,* presented at the Conference on the Application of Accelerators to Research and Industry, Denton, TX, November 2022.

Nuclear physics with TriSol at Notre Dame's Nuclear Science Laboratory, T. Ahn *et al*.., presented at the 19th International Conference on Electromagnetic Isotope Separators and Related Topics (EMIS), Daejeon, South Korea, October 2022.

Construction of the Superallowed Transition Beta-Neutrino Decay Ion Coincidence Trap, M. Brodeur *et al*.., presented at the 19th International Conference on Electromagnetic Isotope Separators and Related Topics (EMIS), Daejeon, South Korea, October 2022.

First direct measurement of the ^{34}Ar(α,p)^{37}K reaction cross section for x-ray burst nucleosynthesis, K. A. Chipps *et al*., presented at the annual meeting of the Division of Nuclear Physics, New Orleans, LA, October 2022.

Total Cross-Section Measurement of ^{14}O(α,p)^{17}F with an Active Target Ionization Chamber, W. von Seeger *et al*., presented at the annual meeting of the Division of Nuclear Physics, New Orleans, LA, October 2022.

Measuring the ^{15}O(α, γ)^{19}Ne reaction rate in Type I X-ray bursts using the GADGET II TPC, T. Wheeler *et al*., presented at the annual meeting of the Division of Nuclear Physics, New Orleans, LA, October 2022.

TriSol: Improving RIBs at the University of Notre Dame, P. D. O'Malley *et al*., presented at the annual meeting of the Division of Nuclear Physics, New Orleans, LA, October 2022.

^{17}F(p, α) Measurements with TriSol, S. Coil *et al*., presented at the annual meeting of the Division of Nuclear Physics, New Orleans, LA, October 2022.

^{20}Ne(α,p)^{23}Na studied to constrain supernova type Ia nucleosynthesis, C. Boomershine *et al*., presented at the annual meeting of the Division of Nuclear Physics, New Orleans, LA, October 2022.

Active Target Measurement of the ^{25,26}Mg(α,n)^{28,29}Si Total Cross Section, D. Blankstein *et al*., presented at the annual meeting of the Division of Nuclear Physics, New Orleans, LA, October 2022.

Constraining the ^{30}P(p,γ)^{31}S reaction rate in ONe nova nucleosynthesis via ^{31}Cl β-delayed proton decay using GADGET, T. Budner *et al*., presented at the annual meeting of the Division of Nuclear Physics, New Orleans, LA, October 2022.

^{58}Ni(^{3}He,t)^{58}Cu*(γ) Measurements with GODDESS to Constrain Astrophysical Rate of ^{57}Ni(p,γ)^{58}Cu*, S. Carmichael *et al*., presented at the annual meeting of the Division of Nuclear Physics, New Orleans, LA, October 2022.

Direct Measurement of the ^{26}Al(α,p) Reaction Cross-Section, J. D. Forson *et al*., presented at the annual meeting of the Division of Nuclear Physics, New Orleans, LA, October 2022.

The neutron irradiation station at Notre Dame, M. Matney *et al*., presented at the annual meeting of the Division of Nuclear Physics, New Orleans, LA, October 2022.

Mirror studies in the sd-shell using the (d,p) reaction, S. Pain *et al*., presented at the annual meeting of the Division of Nuclear Physics, New Orleans, LA, October 2022.

Development of the St. Benedict Paul trap for tests of the Standard Model, M. Brodeur *et al*., presented at the annual meeting of the Division of Nuclear Physics, New Orleans, LA, October 2022.

Impacts of a new ^{17}F(p,γ)^{18}Ne rate on nova nucleosynthesis, L. Templeton et al., presented at the annual Physics Conference, Washington D.C., October 2022.

^{58}Ni(^{3}He,t)^{58}Cu*(γ) Measurements with GODDESS to Constrain Astrophysical Rate of ^{57}Ni(p,γ)^{58}Cu, S. Carmichael *et al*., presented at the International Nuclear Physics Conference, Capetown, South Africa, September 2022.

Precision measurements of mirror transitions at the Nuclear Science Laboratory, M. Brodeur *et al*., presented at the International Nuclear Physics Conference, Capetown, South Africa, September 2022.

^{20}Ne(α,p)^{23}Na studied to constrain supernova type Ia nucleosynthesis, C. Boomershine *et al*., presented at the International Nuclear Physics Conference, Capetown, South Africa, September 2022.

Using ^{31}Cl β-delayed proton decay to constrain ^{30}P(p, γ)^{31}S in ONe novae, T. Budner *et al*., presented at the Conference on Astrophysics with Radioactive Isotopes, Budapest, Hungary, June 2022.

GadgetII: A TPC for studying key resonances relevant in thermonuclear reactions, R. Mahajan *et al*., presented at the JINA-CEE Frontiers in Nuclear Astrophysics Meeting, Notre Dame, IN, May 2022.

^{20}Ne(α,p)^{23}Na studied to constrain supernova Ia nucleosynthesis, C. Boomershine *et al*., presented at the JINA-CEE Frontiers in Nuclear Astrophysics Meeting, Notre Dame, IN, May 2022.

^{58}Ni(^{3}He,t)^{58}Cu*(γ) measurements with GODDESS to constrain astrophysical rate of ^{57}Ni(p,γ)^{58}Cu, S. Carmichael *et al*., presented at the JINA-CEE Frontiers in Nuclear Astrophysics Meeting, Notre Dame, IN, May 2022

Improving the characterization of fusion in a MuSIC detector by spatial localization, R. Kumar *et al*., presented at the April Meeting of the American Physical Society, New York, NY, April 2022.

Searching for low energy protons following the beta decay of ^{32}Ar, L. Schaedig *et al*., presented at the April Meeting of the American Physical Society, New York, NY, April 2022.

Beta-delayed gamma decay of ^{32}Ar, E. Argo *et al*., presented at the April Meeting of the American Physical Society, New York, NY, April 2022.

Low energy study of ^{20}Ne+^{24}Mg fusion to understand the crustal heating in the accreting neutron stars, J. Randhawa *et al*., presented at the April Meeting of the American Physical Society, New York, NY, April 2022.

Examining the E_x=7262 and 7249 keV states of ^{19}F with the ^{15}N(α,γ)^{19}F reaction, G. O'Donnell *et al*., presented at the 88th annual meeting of the Southeastern Section of the American Physical Society, Tallahassee, FL, November 2021.

Fusion cross-section measurements in the Ne-Mg region to constrain pycnonuclear burning in the neutron star crust, J. Randhawa *et al*., presented at the annual Division of Nuclear Physics Meeting, virtual, October 2021.

Active target measurement of the ^{25,26}Mg(α,n)^{28,29}Si total cross section, D. Blankstein *et al*., presented at the annual Division of Nuclear Physics Meeting, virtual, October 2021.

Constraining the ^{30}P(p,γ)^{31}S reaction rate via ^{31}Cl β-delayed proton decay and its effect on One nova nucleosynthesis, T. Budner *et al*., presented at the annual Division of Nuclear Physics Meeting, virtual, October 2021.

Measuring fusion with low-intensity beams using an active target: performance of MuSIC@Indiana, R. Kumar *et al*., presented at the annual Division of Nuclear Physics Meeting, virtual, October 2021.

Examining the E_x=7262 and 7249 keV states of ^{19}F with the ^{15}N(α,γ)^{19}F reaction, G. O'Donnell *et al*., presented at the annual Division of Nuclear Physics Meeting, virtual, October 2021.

Neutron transfer reactions on the ground and isomeric states of a ^{130}Sn beam, K. L. Jones *et al*., presented at the annual Division of Nuclear Physics Meeting, virtual, October 2021.

Constraining the ^{30}P(p,γ)^{31}S reaction using ^{30}P(d,pγ)^{31}P with GODDESS, R. Ghimire *et al*., presented at the annual Division of Nuclear Physics Meeting, virtual, October 2021.

Level scheme of ^{96}Mo from the (d,pγ) reaction measurement with ^{95}Mo beams and GODDESS, H. Garland *et al*., presented at the annual Division of Nuclear Physics Meeting, virtual, October 2021.

^{82}Se(d,pγ) with GODDESS for weak r-process nucleosynthesis, H. Sims *et al*., presented at the annual Division of Nuclear Physics Meeting, virtual, October 2021.

Measuring the ^{134}Xe(d,pγ)^{135}Xe reaction with GODDESS to probe single-neutron excitations in ^{135}Xe, C. Ummel *et al*., presented at the annual Division of Nuclear Physics Meeting, virtual, October 2021.

Constraining astrophysical reaction rates on ground states and astromers at ReA: simultaneous measurement of the ^{38g,m}K reactions, S. Pain *et al*., presented at the annual Division of Nuclear Physics Meeting, virtual, October 2021.

Experimentally constraining the ^{30}P(p,γ)^{31}S reaction rate and its effect on nova nucleosynthesis, T. Budner *et al*., presented at the April meeting of the American Physical Society, virtual, April 2021.

Structure studies of ^{13}Be, J. Kovoor *et al*., presented at the annual Division of Nuclear Physics Meeting, virtual, October 2020.

Quest for α-cluster states to constrain the (α,p) reactions in type-I X-ray bursts using active targets, J. S. Randhawa *et al*., presented at the annual Division of Nuclear Physics Meeting, virtual, October 2020.

Constraining the ^{30}P(p,γ)^{31}S for nova nucleosynthesis by measuring low-energy ^{31}Cl β-delayed proton decays, T. Budner *et al*., presented at the annual Division of Nuclear Physics Meeting, virtual, October 2020.

Precise measurement of ^{28}Al half-life, B. Liu *et al*., presented at the annual Division of Nuclear Physics Meeting, virtual, October 2020.

Proton-transfer reactions in inverse kinematics using the VANDLE neutron array, J. Hooker *et al*., presented at the annual Division of Nuclear Physics Meeting, virtual, October 2020.

Precision half-life measurement of ^{33}Cl, P. O'Malley *et al*., presented at the annual Division of Nuclear Physics Meeting, virtual, October 2020.

Informing the level scheme of ^{95}Mo through ^{95}Mo(d,pγ)^{96}Mo with GODDESS, H. Garland *et al*., presented at the annual Division of Nuclear Physics Meeting, virtual, October 2020.

Measuring the ^{134}Te(d,pγ)^{135}Te reaction with GODDESS to probe the single-particle structure of ^{135}Te, C. C. Ummel *et al*., presented at the annual Division of Nuclear Physics Meeting, virtual, October 2020.

Constraining the ^{30}P(p,γ)^{31}S reaction using ^{30}P(d,pγ)^{31}P with GODDESS, R. Ghimire *et al*., presented at the annual Division of Nuclear Physics Meeting, virtual, October 2020.

Reducing uncertainties in spectroscopic factors of N~50 nuclei through a combined analysis of neutron transfer reactions at two energies, H. Sims *et al*., presented at the annual Division of Nuclear Physics Meeting, virtual, October 2020.

Spectroscopic study of the ^{38}K^{g,m}(d,p) reaction at ReA3 for nova nucleosynthesis, S. D. Pain *et al*., presented at the annual Division of Nuclear Physics Meeting, virtual, October 2020.

Studying the energy levels of ^{39}Ca for the ^{38}K(p,γ)^{39}Ca reaction rate, M. Hall *et al.*, presented at the Annual Meeting of the American Physical Society, Washington D.C., April 2020.

Determining the astrophysical ^{20}Ne(α,p)^{23}Na reaction rate from measurements with the Notre Dame 5U accelerator, A. Davis *et al.*, presented at the Annual Meeting of the American Physical Society, Washington D.C., April 2020.

Proton decay of ^{21}Na for ^{20}Ne energy levels, M. J. Kim et al., presented at International Conference on Accelerators and Beam Utilizations, Daejeon, Korea, November 2019.

Probing single-particle ^{11}C levels produced via the ^{10}C(d,p) reaction, M. Baines *et al.*, presented at the annual Division of Nuclear Physics Meeting, Crystal City, VA, October 2019.

Investigation of the QRPA method for the neutrinoless doube beta decay candidate ^{136}Xe using two-nucleon transfer, R. Toomey *et al.*, presented at the annual Division of Nuclear Physics Meeting, Crystal City, VA, October 2019.

Studying the energy levels of ^{39}Ca for the ^{38}K(p,γ)^{39}Ca reaction rate, M. Hall *et al.*, presented at the annual Division of Nuclear Physics Meeting, Crystal City, VA, October 2019.

Precise half-life measurement of the superallowed mixed-mirror decaying ^{15}O, D. P. Burdette *et al.*, presented at the annual Division of Nuclear Physics Meeting, Crystal City, VA, October 2019.

^{135}Xe structure deduced via ^{134}Xe(d,pγ) with GODDESS, G. Seymour *et al.*, presented at the annual Division of Nuclear Physics Meeting, Crystal City, VA, October 2019.

Level structure of ^{96}Mo from the (d,pγ) measurement with ^{95}Mo beams and GODDESS, H. Garland *et al.*, presented at the annual Division of Nuclear Physics Meeting, Crystal City, VA, October 2019.

Measuring the ^{134}Te(d,pγ)^{135}Te reaction with GODDESS to deduce the single-particle structure of ^{135}Te and inform neutron capture, C. C. Ummel *et al.*, presented at the annual Division of Nuclear Physics Meeting, Crystal City, VA, October 2019.

Constraining the ^{30}P(p,γ)^{31}S reaction using ^{30}P(d,pγ)^{31}P with GODDESS, R. Ghimire *et al.*, presented at the annual Division of Nuclear Physics Meeting, Crystal City, VA, October 2019.

Particle decay of the 6.15 MeV level in ^{18}Ne, K. A. Chipps *et al.*, presented at the annual Division of Nuclear Physics Meeting, Crystal City, VA, October 2019.

Precision half-life measurement of ^{33}Cl, P. O'Malley *et al.*, presented at the annual Division of Nuclear Physics Meeting, Crystal City, VA, October 2019.

Measurement of the B(E2;$2^+ \rightarrow 1^+$) of ^{8}Li and comparisons to ab initio calculations, S. L. Henderson *et al.*, presented at the annual Division of Nuclear Physics Meeting, Crystal City, VA, October 2019.

Precision half-life measurement of ^{29}P, J. Long *et al.*, presented at the annual Division of Nuclear Physics Meeting, Crystal City, VA, October 2019.

Determining the astrophysical ^{20}Ne(α,p)^{23}Na reaction rate using the Notre Dame 5U accelerator, A. Davis *et al.*, presented at the annual Division of Nuclear Physics Meeting, Crystal City, VA, October 2019.

First measurement of low-energy resonances in the ^{24}Mg(α,pγ)^{27}Al reaction, T. Ahn et al., presented at the April Meeting of the American Physical Society, Denver, CO, April 2019.

GODDESS and the ORRUBA arrays for ReA and Fast Beams at FRIB, S. Pain et al., presented at the April Meeting of the American Physical Society, Denver, CO, April 2019.

Using GODDESS to constrain r-process neutron capture rates with (d,pγ) reactions, C. Ummel et al., presented at the April Meeting of the American Physical Society, Denver, CO, April 2019.

s-wave scattering lengths for the ^{7}Be+p system from an R-matrix analysis, S. N. Paneru et al., presented at the DAE International Symposium on Nuclear Physics, Mumbai, December 2018.

Commissioning of the Solenoid Spectrometer for Nuclear AstroPhysics at Notre Dame, J. Allen *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Waikoloa, HI, October 2018.

1st Measurement of the B(E2) of the 1/2- ->3/2- transition in Be-7, S. Henderson *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Waikoloa, HI, October 2018.

Structure Studies with Low-energy Radioactive Beams from TwinSol: Resonant scattering and (α,n) reactions using Active Targets, T. Ahn *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Waikoloa, HI, October 2018.

Development of an Active Target High Efficiency Detector for Nuclear Astrophysics (ATHENA) at Notre Dame, D. Blankstein *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Waikoloa, HI, October 2018.

New Evidence for Near-Threshold 3/2+ States in 19Ne and Constraints on the 18F(p,α)15O Reaction Rate, M. Hall *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Waikoloa, HI, October 2018.

Spectroscopic strengths of low-lying levels in 18Ne, P. D. O'Malley *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Waikoloa, HI, October 2018.

Proton Transfer Reactions Studied Using the Versatile Array of Neutron Detectors at Low Energy (VANDLE), C. Thornsberry *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Waikoloa, HI, October 2018.

Benchmarking the (d,p) reaction for obtaining (p,γ) rates for N=Z nuclei, S. D. Pain *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Waikoloa, HI, October 2018.

Transfer of the Oak Ridge Enge Split-Pole Spectrograph to Notre Dame, P. D. O'Malley et al., presented at the Symposium on Radiation Measurements and Applications, Ann Arbor, MI, June 2018.

Commissioning run of the Solenoid Spectrometer for Nuclear Astrophysics (SSNAP) at Notre Dame, J. Allen et al., presented at the Symposium on Radiation Measurements and Applications, Ann Arbor, MI, June 2018

β-delayed γ decay of ^{20}Mg and the ^{19}Ne(p,γ)^{20}Na breakout reaction in Type I x-ray bursts, B. Glassman et al., presented at the JINA-CEE Frontiers in Nuclear Astrophysics Symposium, South Bend, IN, May 2018.

Spectroscopic strengths of low-lying levels in ^{18}Ne, P. O'Malley et al., presented at the JINA-CEE Frontiers in Nuclear Astrophysics Symposium, South Bend, IN, May 2018.

New method of measuring low-energy (α,p) reactions in inverse kinematics, K. Chae et al., presented at the JINA-CEE Frontiers in Nuclear Astrophysics Symposium, South Bend, IN, May 2018.

Studying the energy levels in ^{19}Ne above the proton threshold, M. Hall et al., presented at the JINA-CEE Frontiers in Nuclear Astrophysics Symposium, South Bend, IN, May 2018.

Measuring the B(E2) of the ½- → 3/2- transition in ^{7}Be, S. Henderson et al., presented at the JINA-CEE Frontiers in Nuclear Astrophysics Symposium, South Bend, IN, May 2018.

s-wave scattering lengths for ^{7}Be+p system from R-matrix analysis, S. Paneru *et al*., presented at the April Meeting of the American Physical Society, Columbus, OH, April 2018.

Spectroscopic factors of low-lying levels in ^{18}Ne, P. D. O'Malley et al., presented at the Fall Meeting of the Division of Nuclear Physics, Pittsburgh, PA, October 2017.

Precision lifetime measurement of ^{15}O, D. Burdette et al., presented at the Fall Meeting of the Division of Nuclear Physics, Pittsburgh, PA, October 2017.

Precision half-life measurement of ^{25}Al, J. Long et al., presented at the Fall Meeting of the Division of Nuclear Physics, Pittsburgh, PA, October 2017.

Vertex reconstruction for the ^{10}C(α,α)^{10}C scattering reaction using the Prototype Active-Target Time-Project Chamber, T. Ahn et al., presented at the Fall Meeting of the Division of Nuclear Physics, Pittsburgh, PA, October 2017.

Heavy-ion induced transfer reactions on ^{130}Sn, S. Burcher et al., presented at the Fall Meeting of the Division of Nuclear Physics, Pittsburgh, PA, October 2017.

Updates to the development to the Solenoid Spectrometer for Nuclear Astrophysics (SSNAP) at Notre Dame, J. Allen et al., presented at the Fall Meeting of the Division of Nuclear Physics, Pittsburgh, PA, October 2017.

Exploring single-hole state evolution near the N=50 shell closure, P. Tai et al., presented at the Fall Meeting of the Division of Nuclear Physics, Pittsburgh, PA, October 2017.

Commissioning of a Faraday cup for the Solenoid Spectrometer for Nuclear Astrophysics (SSNAP), E. Garcia et al., presented at the Fall Meeting of the Division of Nuclear Physics, Pittsburgh, PA, October 2017.

Gamma ray spectroscopy of ^{19}Ne near the ^{18}F+p threshold, M. Hall et al., presented at the Fall Meeting of the Division of Nuclear Physics, Pittsburgh, PA, October 2017.

Reaction measurements with the Jet Experiments in Nuclear Structure and Astrophysics (JENSA) gas jet target , K. A. Chipps et al., presented at the Fall Meeting of the Division of Nuclear Physics, Pittsburgh, PA, October 2017.

Elastic and inelastic scattering of ^{134}Xe beams on CD_2 targets measured with GODDESS, H. Sims et al., presented at the Fall Meeting of the Division of Nuclear Physics, Pittsburgh, PA, October 2017.

Measurement of proton-induced transfer reactions with JENSA, S. Chatterjee et al., presented at the Fall Meeting of the Division of Nuclear Physics, Pittsburgh, PA, October 2017.

Design and calibration of GODDESS, a particle-γ spectrometer, H. Garland et al., presented at the Fall Meeting of the Division of Nuclear Physics, Pittsburgh, PA, October 2017.

Developing the (d,pγ) reaction as a surrogate for (n,γ) in inverse kinematics, A. Lepailleur et al., presented at the Fall Meeting of the Division of Nuclear Physics, Pittsburgh, PA, October 2017.

Beta-delayed neutron spectroscopy of ^{72}Co with VANDLE, A. Keeler et al., presented at the Fall Meeting of the Division of Nuclear Physics, Pittsburgh, PA, October 2017.

Studying ^{10}Be and ^{11}Be halo states through the (p,d) single-neutron transfer reaction, K. Kuhn et al., presented at the Fall Meeting of the Division of Nuclear Physics, Pittsburgh, PA, October 2017.

Transfer reactions for constraining astrophysical nucleosynthesis, S. D. Pain *et al*., presented at the Conference on Nuclear Physics in Astrophysics VIII, Catania, Italy, June 2017.

X-ray burst studies with the JENSA gas jet target, K. Schmidt *et al*., presented at the Conference on Nuclear Physics in Astrophysics VIII, Catania, Italy, June 2017.

Informing neutron capture on tin isotopes in r-process freeze out, J. Cizewski *et al*., presented at the international conference on Advances in Radioisotope Science ARIS2017, Keystone, CO, May 2017.

Precision measurements of mirror transitions at the University of Notre Dame, M Brodeur *et al*., presented at the international conference on Advances in Radioisotope Science ARIS2017, Keystone, CO, May 2017.

Searching for cluster states in isosping mirror nuclei C-14 and O-14 using radioactive beams at TwinSol, T. Ahn *et al*., presented at the international conference on Advances in Radioisotope Science ARIS2017, Keystone, CO, May 2017.

Measurements of gamma rays from Be-7 and Li-7 inelastic scattering, S. Henderson *et al*., presented at the international conference on Advances in Radioisotope Science ARIS2017, Keystone, CO, May 2017.

Precision half-life measurements of ^{17}F and ^{25}Al at the University of Notre Dame, J. Long *et al*., presented at the international conference on Advances in Radioisotope Science ARIS2017, Keystone, CO, May 2017.

Spectroscopic strengths of low-lying levels in ^{18}Ne, P. O'Malley *et al*., presented at the international conference on Advances in Radioisotope Science ARIS2017, Keystone, CO, May 2017.

Precision experiments to test the Standard Model at the University of Notre Dame, M. Brodeur *et al*., presented at the April Meeting of the American Physics Society, Washington D. C., January 2017.

Direct reaction measurements using GODDESS, S. D. Pain *et al.,* presented at the Conference on the Application of Accelerators to Research and Industry (CAARI), Ft. Worth, TX, November 2016.

Direct neutron capture on neutron-rich tin isotopes, B. Manning *et al*., presented at the Conference on Fission and Properties of Neutron-Rich Nuclei, Sanibel, FL, November 2016.

Measuring the nuclear levels in ^{19}Ne using GODDESS, M. Hall *et al*., presented at the APS Division of Nuclear Physics Meeting, Vancouver, CA, October 2016.

Spectroscopic strengths of low-lying levels in ^{18}Ne, P. O'Malley *et al*., presented at the APS Division of Nuclear Physics Meeting, Vancouver, CA, October 2016.

A new ^{55}Ni(p,γ) rate and its implications on the rp-process, W. Ong *et al*., presented at the APS Division of Nuclear Physics Meeting, Vancouver, CA, October 2016.

Studying ^{10}Be and ^{11}Be halo states through the (p,d) single-neutron transfer reaction, K. Kuhn *et al*., presented at the APS Division of Nuclear Physics Meeting, Vancouver, CA, October 2016.

Measurements of γ rays from ^{7}Be inelastic scattering, S. L. Henderson *et al*., presented at the APS Division of Nuclear Physics Meeting, Vancouver, CA, October 2016.

Study of the structure of ^{14}O using resonant scattering, T. Ahn *et al*., presented at the APS Division of Nuclear Physics Meeting, Vancouver, CA, October 2016.

Developing the (d,pγ) reaction as a surrogate for (n,γ) in inverse kinematics, A. Lepailleur *et al*., presented at the APS Division of Nuclear Physics Meeting, Vancouver, CA, October 2016.

Measurement of ^{34}Ar(α,p)^{37}K using the JENSA gas jet target, J. Browne *et al*., presented at the APS Division of Nuclear Physics Meeting, Vancouver, CA, October 2016.

Construction of the Solenoid Spectrometer for Nuclear Astrophysics (SSNAP) at Notre Dame, J. Allen *et al*., presented at the APS Division of Nuclear Physics Meeting, Vancouver, CA, October 2016.

Gamma-ray spectroscopy of ^{131}Sn via the (^{9}Be,^{8}Be γ) reactions, S. Burcher *et al*., presented at the APS Division of Nuclear Physics Meeting, Vancouver, CA, October 2016.

β-delayed neutron spectroscopy around N=82 with VANDLE, M. Madurga Flores *et al*., presented at the APS Division of Nuclear Physics Meeting, Vancouver, CA, October 2016.

Precision half-life measurement of ^{17}F, J. Long *et al*., presented at the APS Division of Nuclear Physics Meeting, Vancouver, CA, October 2016.

Commissioning of the JENSA gas jet target at NSCL, K. Schmidt *et al*., presented at the APS Division of Nuclear Physics Meeting, Vancouver, CA, October 2016.

The first measurements using GODDESS, S. D. Pain *et al*., presented at the APS Division of Nuclear Physics Meeting, Vancouver, CA, October 2016.

Testing of a micro-channel plate detector for improved TwinSol measurements, R. LeBlanc *et al*., presented at the APS Division of Nuclear Physics Meeting, Vancouver, CA, October 2016.

The β decay of ^{32}Cl, E. Aboud *et al*., presented at the APS Division of Nuclear Physics Meeting, Vancouver, Canada, October 2016.

Neutron transfer reactions with exotic tin beams and neutron capture, J. A. Cizewski *et al*., Presented at Direct Reactions with Exotic Beams (DREB2016), Halifax, Canada, July 2016.

Revalidation of the Isobaric Multiplet Mass Equation for the A=20 quintet, B. Glassman et al., presented at the APS April Meeting 2016, St. Lake City, UT, April 2016.

Search for novel α-cluster structure in light unstable nuclei, T. Ahn *et al*., presented at the Annual Fall Meeting of the APS Prairie Section, Notre Dame, IN, November 2015.

Measurement of the ^{1}H(^{17}F,α)^{14}O cross section at TwinSol, J. Hu *et al*., presented at the Annual Fall Meeting of the APS Prairie Section, Notre Dame, IN, November 2015.

Spectroscopic strengths of low-lying levels in ^{18}Ne, P. O'Malley *et al*., presented at the Annual Fall Meeting of the APS Prairie Section, Notre Dame, IN, November 2015.

Precision half-life measurement of ^{17}F, C. Nicoloff *et al*., presented at the Annual Fall Meeting of the APS Prairie Section, Notre Dame, IN, November 2015.

A measurement of the nuclear levels in ^{19}Ne using GODDESS, M. Hall *et al*., presented at the Annual Fall Meeting of the APS Prairie Section, Notre Dame, IN, November 2015.

The design of SSNAP a Solenoid Spectrometer for Use with TwinSol, O. Hall *et al*., presented at the Annual Fall Meeting of the APS Prairie Section, Notre Dame, IN, November 2015.

Evaluation of Quantum Monte Carlo Overlaps via ^{6,7}Li(d,p) Reactions, S. T. Marley *et al*., presented at the Fall Meeting of the DNP, Sante Fe, NM, October 2015.

Analyzing the structure of ^{14}O with TwinSol and AT-TPC, L. Jensen *et al*., presented at the Fall Meeting of the DNP, Sante Fe, NM, October 2015.

Investigating TwinSol Gas Cell Windows, K. Cushman *et al*., presented at the Fall Meeting of the DNP, Sante Fe, NM, October 2015.

Development of a plastic phoswich for reaction studies, C. Thornsberry *et al*., presented at the Fall Meeting of the DNP, Sante Fe, NM, October 2015.

Search for α cluster structure in ^{14}O, T. Ahn *et al*., presented at the Fall Meeting of the DNP, Sante Fe, NM, October 2015.

Reducing ambiguities in spectroscopic factors with combined measurements and the ^{86}Kr(d,p) reaction at 35 MeV/u, D. Walter *et al*., presented at the Fall Meeting of the DNP, Sante Fe, NM, October 2015.

Measured ^{19}F(α,n) with VANDLE for Nuclear Safeguards, W. A. Peters *et al*., presented at the Fall Meeting of the DNP, Sante Fe, NM, October 2015.

Transfer reaction studies with JENSA, P. Thompson *et al*., presented at the Fall Meeting of the DNP, Sante Fe, NM, October 2015.

Transfer reactions with JENSA: study of the levels in ^{12}N using ^{14}N(p,t), K. A. Chipps *et al*., presented at the Fall Meeting of the DNP, Sante Fe, NM, October 2015.

Constraint of the astrophysical ^{26g}Al(p,γ)^{27}Si destruction rate at stellar temperatures, S. D. Pain *et al*., presented at the Fall Meeting of the DNP, Sante Fe, NM, October 2015.

Beta-delayed neutron spectroscopy using VANDLE at CARIBU, S. Taylor *et al*., presented at the Fall Meeting of the DNP, Sante Fe, NM, October 2015.

Study of beta-delayed neutrons near ^{78}Ni using VANDLE, S. Paulauskas *et al*., presented at the Fall Meeting of the DNP, Sante Fe, NM, October 2015.

Studying ^{10}Be and ^{11}Be halo states through the (p,d) single-neutron transfer reaction, K. Kuhn *et al*., presented at the Fall Meeting of the DNP, Sante Fe, NM, October 2015.

Efficacy of Quantum Monte Carlo Overlap Functions in Single Nuclear Transfer Reactions of Light Nuclei, S. T. Marley et al., presented at the 34th Mazurian Lakes Conference on Physics, Piaski, Poland, September 2015.

Study of the ^{19}F(α,n) reaction for homeland security, S. J. Thompson et al., presented at the 56th Annual Meeting of the Institute of Nuclear Materials Management, Indian Wells, CA, July 2015.

Low energy scattering cross section ratios of ^{14}N(p,p)^{14}N, R. J. deBoer et al., presented at the Conference on Nuclear Physics in Astrophysics 7, York, U.K., June 2015.

Using the prototype active-target time-projection chamber with Twinsol radioactive beams, T. Ahn et al., presented at the 2015 Conference on Electromagnetic Ion Separators, Grand Rapids, MI, May 2015.

Recent results from the TwinSol low-energy RIB facility, F. Becchetti et al., presented at the 2015 Conference on Electromagnetic Ion Separators, Grand Rapids, MI, May 2015.

A recoil separator for nuclear astrophysics SECAR, G. P. A. Berg et al., presented at the 2015 Conference on Electromagnetic Ion Separators, Grand Rapids, MI, May 2015.

TwinSol: Cleaning up LE RIB production at Notre Dame, P. D. O'Malley et al., presented at the 2015 Conference on Electromagnetic Ion Separators, Grand Rapids, MI, May 2015.

Minimizing residual pressure within a windowless gas target system – JENSA, O. Gomez et al., presented at the annual meeting of the Southeastern Section of the American Physical Society, Columbia, SC, November 2014.

Neutron hole states in ^{131}Sn studied via the ^{132}Sn(d,t)^{131}Sn reaction, R. Orlandi *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Waikoloa, HI, October 2014.

Neutron spectroscopy measurements of the d(^{7}Be,n)^{8}B reaction with a deuterated scintillator array (UM-DSA), M. Febbraro *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Waikoloa, HI, October 2014.

The study of halo states in ^{10}Be and ^{11}Be, K. Kuhn *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Waikoloa, HI, October 2014.

Measuring ^{19}F(α,n) with VANDLE for Nuclear Safeguards, W. A. Peters *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Waikoloa, HI, October 2014.

Reducing ambiguities in spectroscopic factors and the ^{86}Kr(d,p) reaction at 35 MeV/u, D. Walter *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Waikoloa, HI, October 2014.

Monte Carlo simulations of VANDLE for reaction and β-delayed neutron decay studies, S. Ilyushkin *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Waikoloa, HI, October 2014.

An overview of the JENSA gas jet target system with preliminary ^{20}Ne(p,t)^{18}Ne results, P. Thompson *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Waikoloa, HI, October 2014.

Study of the levels in ^{12}N using the ^{14}N(p,t) reaction with JENSA, K. A. Chipps *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Waikoloa, HI, October 2014.

Measurements of states in ^{127}Sn and ^{129}Sn with charged particle-γ coincidences, B. Manning *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Waikoloa, HI, October 2014.

Measurement of the ^{19}F(α,n) cross section for nuclear safeguards science, C. S. Reingold *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Waikoloa, HI, October 2014.

SuperORRUBA in the JENSA gas jet target, Nata Franco Soares de Bem *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Waikoloa, HI, October 2014.

-delayed neutron spectroscopy of Ga isotopes with VANDLE, M. Madurga *et al*., presented at the Zakopane Conference on Nuclear Physics, Zakopane, Poland, August 2014.

Gamow-Teller decay of ^{78}Ni core states from beta delayed neutron spectroscopy, R. Grzywacz *et al*., presented at Nuclear Structure 2014, Vancouver, Canada, July 2014.

Study of beta-delayed neutrons from ^{77}Cu using VANDLE, S. V. Paulauskas *et al*., presented at Nuclear Structure 2014, Vancouver, Canada, July 2014.

Resonance energy measurements along the rp-process path with GRETINA, W. Ong *et al*., presented at NIC XIII – Nuclei in the Cosmos, Debrecen, Hungary, July 2014.

Neutron capture cross sections near ^{132}Sn and r-process nucleosynthesis, J. A. Cizewski *et al*., presented at NIC XIII – Nuclei in the Cosmos, Debrecen, Hungary, July 2014.

Development of GODDESS for transfer studies for r-process nucleosynthesis, S. D. Pain *et al*., presented at NIC XIII – Nuclei in the Cosmos, Debrecen, Hungary, July 2014.

Constraining the ^{26}Al(p,γ)^{27}Si reaction rate, S. D. Pain *et al*., presented at NIC XIII – Nuclei in the Cosmos, Debrecen, Hungary, July 2014.

^{31}Cl beta decay and the ^{30}P(p,γ)^{31}S reaction rate, M. B. Bennett *et al*., presented at NIC XIII – Nuclei in the Cosmos, Debrecen, Hungary, July 2014.

Studies of (α,p) reactions important for X-ray bursts using radioactive beams from RESOLUT, J. C. Blackmon *et al*., presented at NIC XIII – Nuclei in the Cosmos, Debrecen, Hungary, July 2014.

JENSA: A new tool for direct reaction experiments, A. Kontos *et al*., presented at DREB2014 – Direct Reactions with Exotic Beams, Darmstadt, Germany, June 2014.

Constraining the ^{26}Al(p,γ)^{27}Si reaction rate, S. D. Pain *et al*., presented at DREB2014 – Direct Reactions with Exotic Beams, Darmstadt, Germany, June 2014.

Systematics of single-neutron strength in neutron-rich Sn nuclei, J. A. Cizewski *et al*., presented at DREB2014 – Direct Reactions with Exotic Beams, Darmstadt, Germany, June 2014.

Studies of (α,p) reactions important for X-ray bursts using radioactive beams from RESOLUT, J. C. Blackmon *et al*., presented at ARIS2014- Advances in Radioactive Isotope Science, Tokyo, Japan, June 2014.

β-delayed neutron spectroscopy of r-process fission fragments, M. Madurga *et al*., presented at ARIS2014- Advances in Radioactive Isotope Science, Tokyo, Japan, June 2014.

Beta decay as a probe of explosive nucleosynthesis in classical novae, C. Wrede *et al*., presented at CAARI – the Conference on the Application of Accelerators to Research and Industry, San Antonio, TX, May 2014.

The ^{26}Al(p,γ)^{27}Si reaction at stellar temperatures, S. D. Pain *et al*., presented at CAARI – the Conference on the Application of Accelerators to Research and Industry, San Antonio, TX, May 2014.

Past and future studies of beta-delayed neutrons with VANDLE, K. Kolos *et al*., presented at CAARI – the Conference on the Application of Accelerators to Research and Industry, San Antonio, TX, May 2014.

First experiments performed with the JENSA gas jet target system, P. J. Thompson *et al*., presented at the April Meeting of the American Physical Society, Savannah, GA, April 2014.

Informing neutron-capture rates through (d,p) reactions on neutron-rich tin isotopes, B. Manning *et al*., presented at the April Meeting of the American Physical Society, Savannah, GA, April 2014.

Particle-gamma measurements for nuclear astrophysics, S. D. Pain *et al*., presented at the April Meeting of the American Physical Society, Savannah, GA, April 2014.

Determining the resonance strength of the 56Ni rp-process waiting point through (d,n) with VANDLE and MoNA-LISA, W. A. Peters *et al*., presented at the April Meeting of the American Physical Society, Savannah, GA, April 2014.

The JENSA Gas Jet Target, K. A. Chipps *et al*., presented at the April Meeting of the American Physical Society, Savannah, GA, April 2014.

Testing and characterization of the JENSA gas jet target, K. A. Chipps *et al*., presented at the Fall Meeting of the DNP, Newport News, VA, October 2013.

Measurement of the ^{19}F(α,n) cross section for nuclear safeguards science, C. S. Reingold *et al*., presented at the Fall Meeting of the DNP, Newport News, VA, October 2013.

Measurements with heavy-ion (^{9}Be,^{8}Be-γ) and (`^{13}C,^{12}C-γ) single-neutron transfers to inform on the astrophysical ^{130}Sn(n,γ) reaction, A. Bey *et al*., presented at the Fourth International Workshop on Compound-Nuclear Reactions, Sao Paulo, Brazil, October 2013.

Measurement of astrophysically important excitation energies of ^{58}Zn with GRETINA, C. Langer for the E11024 Collaboration, presented at the Fall Meeting of the DNP, Newport News, VA, October 2013.

Measuring the partial width of the ^{56}Ni proton-capture resonance through (d,n) with VANDLE and MoNA-LISA, W. Peters *et al*., presented at the Fall Meeting of the DNP, Newport News, VA, October 2013.

Coupling the ORRUBA and Gammasphere Arrays, S. D. Pain *et al*., presented at the Fall Meeting of the DNP, Newport News, VA, October 2013.

High-resolution single-neutron transfer measurements in ^{131}Sn, A. Bey *et al*., presented at the Fall Meeting of the DNP, Newport News, VA, October 2013.

Evolution of single-neutron states in tin isotopes, B. Manning *et al*., presented at the Fall Meeting of the DNP, Newport News, VA, October 2013.

First study of neutron-transfer onto neutron-rich ^{80}Ge, S. Ahn *et al*., presented at the Fall Meeting of the DNP, Newport News, VA, October 2013.

Beta-delayed neutron spectroscopy on the N=53 ^{84}Ga isotope with VANDLE, M. Madurga *et al*., presented at the Fall Meeting of the DNP, Newport News, VA, October 2013.

Development of the Position Sensitive Ionization Chamber for ANASEN, H. Gardiner *et al*., presented at the Fall Meeting of the DNP, Newport News, VA, October 2013.

Study of the beta-delayed neutrons from ^{77}Cu using VANDLE, S. Paulauskas *et al*., presented at the Fall Meeting of the DNP, Newport News, VA, October 2013.

First scattering reaction using JENSA Gas Jet Target, A. Sachs *et al*., presented at the Fall Meeting of the DNP, Newport News, VA, October 2013.

Optimizing VANDLE for Decay Spectroscopy, N. T. Brewer *et al*., presented at the Fall Meeting of the DNP, Newport News, VA, October 2013.

Optimization of VANDLE for β-delayed neutron decay studies using GEANT4, S. Ilyushkin *et al*., presented at the Fall Meeting of the DNP, Newport News, VA, October 2013.

Gamma-ray spectroscopy of the semi-magical ^{131}Sn$_{81}$: precise location of the single-neutron states and first measurement of neutron-transfer on an isomer, A. Bey et al., presented at the XXXIII Mazurian Lakes Conference on Physics, Piaski, Poland, September 2013.

β-decay properties of fission fragments in the r-process path, M. Madurga *et al*., presented at the International Nuclear Physics Conference, Florence, Italy, June 2013.

Measurement of astrophysically important excitation energies of ^{58}Zn with GRETINA, C. Langer *et al*., presented at the International Nuclear Physics Conference, Florence, Italy, June 2013.

A next generation recoil separator for nuclear astrophysics SECAR, G. P. A. Berg *et a*l., presented at Nuclear Physics in Astrophysics, Lisbon, Portugal, May 2013.

Development of a tracking detector for transfer reactions with light beams at NSCL, S. Ilyushkin *et al*., presented at the Spring Meeting of the American Physical Society, Denver, CO, April 2013.

Designing the coupling of Gammasphere and ORRUBA, C. M. Shand *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Newport Beach, CA, October 2012.

Studies of ^{18}Ne using ANASEN, L. E. Linhardt *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Newport Beach, CA, October 2012.

Neutron transfer reactions with ^{126,128}Sn rare isotope beams, B. Manning *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Newport Beach, CA, October 2012.

Commissioning of the VANDLE neutron array with beta-delayed neutron spectroscopy, W. Peters *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Newport Beach, CA, October 2012.

Low-lying structure of the N=49 nucleus ^{81}Ge, S. Ahn *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Newport Beach, CA, October 2012.

Search for resonant enhancement of the ^{7}Be+d reaction, P. O'Malley *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Newport Beach, CA, October 2012.

Measurement of the ^{26g}Al(d,p)^{27}Al reaction to constrain the ^{26g}Al destruction reaction rate, S. D. Pain for the ORRUBA/RIBENS collaboration, *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Newport Beach, CA, October 2012.

SuperORRUBA Test Results, A. J. Burkhart *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Newport Beach, CA, October 2012.

Preparation for MoNA/LISA VANDLE ^{56}Ni(d,n) Experiment at the NSCL, Z. J. Bergstrom *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Newport Beach, CA, October 2012.

Assembling, Characterizing, and Measuring the Efficiency of VANDLE, R. Ikeyama *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Newport Beach, CA, October 2012.

Neutron transfer reactions with tin beams and r-process nucleosynthesis, J. A. Cizewski *et al*., presented at the XII International Symposium on Nuclei in the Cosmos, Cairns, Australia, August 2012.

Beta decay of ^{26}P to determine the ^{25}Al(p,γ)^{26}Si reaction rate in novae, C. Wrede *et al.*, presented at the XII International Symposium on Nuclei in the Cosmos, Cairns, Australia, August 2012.

Study of the low-lying structure of the N=49 nucleus, ^{81}Ge, S. Ahn *et al*., presented at the Nuclear Structure 2012 Conference, Argonne, IL, August 2012.

Single neutron levels near the N=82 shell gap, B. Manning *et al*., presented at the Nuclear Structure 2012 Conference, Argonne, IL, August 2012.

Measurement of the ^{26g}Al(d,p)^{27}Al reaction to constrain the ^{26g}Al(p,γ)^{27}Si reaction rate, S. D. Pain *et al*., presented at the Nuclear Structure 2012 Conference, Argonne, IL, August 2012.

SuperORRUBA with ASICS and the measurement of ^{80}Ge(d,p), S. Ahn *et al*., invited talk, presented at the International Conference on the Application of Accelerators in Research and Industry, Fort Worth, TX, August 2012.

A gas jet target for radioactive ion beam experiments, K. A. Chipps *et al*., invited talk, presented at the International Conference on the Application of Accelerators in Research and Industry, Fort Worth, TX, August 2012.

Nuclear structure near the N=50 shell closure, M. E. Howard *et al*., invited talk, presented at the International Conference on the Application of Accelerators in Research and Industry, Fort Worth, TX, August 2012.

Single-neutron levels near the N=82 shell closure, B. Manning *et al*., invited talk, presented at the International Conference on the Application of Accelerators in Research and Industry, Fort Worth, TX, August 2012.

Coupling Gammasphere and ORRUBA, A. Ratkiewicz *et al*., invited talk, presented at the International Conference on the Application of Accelerators in Research and Industry, Fort Worth, TX, August 2012.

VANDLE: A new neutron array for (d,n) reactions in inverse kinematics, W. A. Peters *et al*., presented at the 7th International Workshop on Direct Reactions with Exotic Beams – DREB2012, Pisa, Italy, March 2012.

Exploring Single-Hole State Evolution Near the N=50 Shell Closure, M. E. Howard *et al*., presented at the 7th International Workshop on Direct Reactions with Exotic Beams – DREB2012, Pisa, Italy, March 2012.

Spectroscopic factors for ^{11}Be from recent (d,p) measurements with a ^{10}Be beam, A. Bey *et al*., presented at the 7th International Workshop on Direct Reactions with Exotic Beams – DREB2012, Pisa, Italy, March 2012.

Exploring Single-Hole State Evolution Near the N=50 Shell Closure, M. E. Howard *et al*., presented at the Division of Nuclear Physics Meeting, East Lansing, MI, October 2011.

Single-neutron levels near the N=82 shell gap, B. Manning *et al*., presented at the Division of Nuclear Physics Meeting, East Lansing, MI, October 2011.

Search for resonant enhancement of the ^{7}Be+d reaction, P. D. O'Malley *et al*., presented at the Division of Nuclear Physics Meeting, East Lansing, MI, October 2011.

Studying the low-lying structure of N=49 nucleus, ^{81}Ge, S. H. Ahn *et al*., presented at the Division of Nuclear Physics Meeting, East Lansing, MI, October 2011.

Developing a fast ionization chamber for transfer reaction studies, K. Y. Chae *et al*., presented at the Division of Nuclear Physics Meeting, East Lansing, MI, October 2011.

Low-threshold neutron detection for proton-transfer reactions with VANDLE, W. A. Peters *et al*., presented at the Division of Nuclear Physics Meeting, East Lansing, MI, October 2011.

Coupling the ORRUBA and Gammasphere Arrays, S. Hardy *et al*., presented at the Division of Nuclear Physics Meeting, East Lansing, MI, October 2011.

Development of tracking detector for transfer reactions with light beams at NSCL, S. Ilyushkin *et al*., presented at the Division of Nuclear Physics Meeting, East Lansing, MI, October 2011.

Measurement of the ^{26}Al(d,p)^{27}Al reaction to constrain the ^{26}Al(p,γ) reaction rate, S. D. Pain *et al*., presented at the Division of Nuclear Physics Meeting, East Lansing, MI, October 2011.

Exploring the single-particle structure of ^{11}Be with the one-neutron transfer reaction ^{2}H(^{10}Be,p)^{11}Be, K. Schmitt *et al*., presented at the Division of Nuclear Physics Meeting, East Lansing, MI, October 2011.

Beam characterization and optimization using a tunable iris aperture, S. A. Graves *et al*., presented at the Division of Nuclear Physics Meeting, East Lansing, MI, October 2011.

Creation of thin deuterated polyethylene targets for inverse kinematics transfer reaction measurements, K. D. Long *et al*., presented at the Division of Nuclear Physics Meeting, East Lansing, MI, October 2011.

Complementary neutron efficiency measurements using VANDLE, P. Copp *et al*., presented at the Division of Nuclear Physics Meeting, East Lansing, MI, October 2011.

Spin assignments of excited states in ^{23}Mg through a ^{24}Mg(p,d)^{23}Mg reaction, S. Strauss *et al*., presented at the Division of Nuclear Physics Meeting, East Lansing, MI, October 2011.

Targets for inverse (^{3}He,d) reaction studies with radioactive ion beams, J. L. Wheeler *et al*., presented at the Division of Nuclear Physics Meeting, East Lansing, MI, October 2011.

Testing a new system for charged-particle nuclear reactions, H. Gardiner *et al*., presented at the Division of Nuclear Physics Meeting, East Lansing, MI, October 2011.

A Gas Jet Target for Radioactive Ion Beam Experiments, K. Chipps *et al*., presented at the 14th international Conference on Capture Gamma-Ray Spectroscopy and Related Topics, Guelph, Ontario Canada, August 2011.

Results of ^{75}As(d,p) in inverse kinematics as a surrogate for neutron capture, W. A. Peters *et al*., presented at the 14th international Conference on Capture Gamma-Ray Spectroscopy and Related Topics, Guelph, Ontario Canada, August 2011.

VANDLE: A new tool for indirectly measuring (p,γ) strengths, W. A. Peters *et al*., presented at the First International Conference on Advances in Radioactive Isotope Science (ARIS-2011), Leuven, Belgium, May 2011.

Implementation of multi-channel electronics into ORNL DAQ system for nuclear reaction studies, S. H. Ahn *et al*., presented at the Spring Meeting of the American Physical Society, Anaheim, CA, April 2011.

The ^{26}Al + p elastic scattering reaction and Galactic abundances of ^{26}Al, S. T. Pittman *et al*., presented at the Spring Meeting of the American Physical Society, Anaheim, CA, April 2011.

Characterization and efficiency of the versatile array of neutron detectors at low energy (VANDLE), W. A. Peters *et al*., presented at the Division of Nuclear Physics Meeting, Sante Fe, NM, November 2010.

Using HiRA and the (p,d) reaction to explore single-hole state evolution near the N=50 shell closure, M. E. Howard *et al*., presented at the Division of Nuclear Physics Meeting, Sante Fe, NM, November 2010.

Study of ^{19}Ne levels of importance to ^{18}F production in novae, P. D. O'Malley *et al*., presented at the Division of Nuclear Physics Meeting, Sante Fe, NM, November 2010.

Study of the ^{19}F(α,p)^{22}Ne reaction with an extended gas target, K. Y. Chae *et al*., presented at the Division of Nuclear Physics Meeting, Sante Fe, NM, November 2010.

Program for simulating energy spectra in transfer reaction studies, S. A. Graves *et al*., presented at the Division of Nuclear Physics Meeting, Sante Fe, NM, November 2010.

Development of a high-rate ionization counter, S. Strauss *et al*., presented at the Division of Nuclear Physics Meeting, Sante Fe, NM, November 2010.

Implanted ^{3}He targets for inverse reaction studies with radioactive ion beams, J. L. Wheeler *et al*., presented at the Division of Nuclear Physics Meeting, Sante Fe, NM, November 2010.

Measurement of ^{26}Al(d,p)^{27}Al to constrain the ^{26}Al(p,□) reaction rate, S. Pain *et al*., presented at the Division of Nuclear Physics Meeting, Sante Fe, NM, November 2010.

Characterization and resolution of VANDLE Modules, I. Spassova *et al*., presented at the Division of Nuclear Physics Meeting, Sante Fe, NM, November 2010.

Optical potential analysis for ^{26}Al elastic scattering of protons and deuterons, A. Bey *et al*., presented at the Division of Nuclear Physics Meeting, Sante Fe, NM, November 2010.

^{7}Be implantation in plastics for prosthesis wear studies, U. Greife *et al*., presented at the Division of Nuclear Physics Meeting, Sante Fe, NM, November 2010.

B-delayed neutron precursors with the Versatile Array of Neutron Detectors at Low Energies (VANDLE), M. Madurga *et al*., presented at the Division of Nuclear Physics Meeting, Sante Fe, NM, November 2010.

Implementation of multi-channel electronics system for astrophysical reaction studies at ORNL, S. H. Ahn *et al*., presented at the Division of Nuclear Physics Meeting, Sante Fe, NM, November 2010.

Results of a recent ^{10}Be(d,p) experiment populating the low-lying levels of ^{11}Be, K. T. Schmitt *et al*., presented at Nuclear Structure 2010, Berkeley, CA, August 2010.

Recent (p,d) Experiment Using HiRA at the NSCL to Explore Single-Hole State Evolution Near the N=50 Shell Closure, M. E. Howard *et al*., presented at the Pan-American Advanced Studies Institute on Rare Isotopes (PASI), Joao Pessoa, Brazil, August 2010.

Single particle spectroscopy of ^{133}Sn via the (d,p) reaction in inverse kinematics, K. L. Jones *et al*., presented at the 11th Symposium on Nuclei in the Cosmos, Heidelberg, Germany, July 2010.

The ^{28}Si(p,t)^{26}Si Reaction and Implications for ^{25}Al(p,□)^{26}Si, K. A. Chipps *et al*., presented at the 11th Symposium on Nuclei in the Cosmos, Heidelberg, Germany, July 2010.

Measurements for understanding the astrophysical destruction of ^{26}Al, S. D. Pain *et al*., presented at the 11th Symposium on Nuclei in the Cosmos, Heidelberg, Germany, July 2010.

Unbound states of ^{32}Cl relevant for novae, M. Matos *et al*., presented at the 11th Symposium on Nuclei in the Cosmos, Heidelberg, Germany, July 2010.

A new technique for measuring astrophysically important (α,p) reactions, K. Y. Chae *et al*., presented at the 11th Symposium on Nuclei in the Cosmos, Heidelberg, Germany, July 2010.

Characterizing VANDLE Modules, W. A. Peters *et al*., presented at the International Nuclear Physics Conference 2010, Vancouver, Canada, July 2010.

Measurements for understanding the astrophysical destruction of ^{26}Al, S. D. Pain *et al*., presented at the International Nuclear Physics Conference 2010, Vancouver, Canada, July 2010.

ORNL Radioactive Beams for Stellar Explosion Studies, M. S. Smith *et al.,* presented at OMEG10, Japan March 2010.

The ^{17}F(p,γ)^{18}Ne resonant cross section, K. A. Chipps *et al*., presented at the IoP Nuclear Physics Conference, Edinburgh, Scotland April 2010.

ORNL Radioactive Beams for Stellar Explosion Studies, M. S. Smith et al., presented at the The 10th International Symposium on Origin of Matter and Evolution of the Galaxies (OMEG10), Osaka, Japan, March 2010.

Spin assignments to excited states in ^{22}Na through a ^{24}Mg(p,^{3}He)^{22}Na reaction measurement, K. Y. Chae *et al*., presented at the April Meeting of the American Physics Society, Washington D.C., February 2010.

Efficiency measurement of VANDLE modules, W. A. Peters *et al*., presented at the April Meeting of the American Physics Society, Washington D.C., February 2010.

Single-particle structure of neutron-rich nuclei, J.A. Cizewski, K.L. Jones, R.L. Kozub, S.D. Pain and the ORRUBA/RIBENS Collaboration, presented at the XXXIII Symposium on Nuclear Physics, Cocoyoc, Mexico January 2010**.**

Measuring ^{80}Ge(d,p) with exotic beams, P. O'Malley *et al*., presented at the conference on Direct Reactions with Exotic Beams, Tallahassee, FL, December 2009.

Position-sensitive double-sided Si strip detectors for transfer, J. A. Cizewski *et al*., presented at the conference on Direct Reactions with Exotic Beams, Tallahassee, FL, December 2009.

Upcoming (p,d) experiment using HIRA at the NSCL to explore single hole state evolution near the N=50 shell closure, M. E.Howard *et al*., presented at the conference on Direct Reactions with Exotic Beams, Tallahassee, FL, December 2009.

HRIBF (d,pγ) setup in inverse kinematics for surrogates and direct transfer measurements, W. A. Peters *et al*., presented at the conference on Direct Reactions with Exotic Beams, Tallahassee, FL, December 2009.

Single-particle structure close to ^{132}Sn explored through the (d,p) reaction in inverse kinematics, K. L. Jones *et al*., presented at the conference on Direct Reactions with Exotic Beams, Tallahassee, FL, December 2009.

First results for a recent ^{10}Be(d,p) experiment in inverse kinematics, K. T. Schmitt *et al*., presented at the conference on Direct Reactions with Exotic Beams, Tallahassee, FL, December 2009.

Unbound states of ^{32}Cl studied via the ^{32}S(^{3}He,t)^{32}Cl charge-exchange reaction, M. Matos *et al*., presented at the 3rd Joint Meeting of the APS Division of Nuclear Physics and the Physical Society of Japan, Waikoloa, HI, October 2009.

GEANT4 simulations of the Versatile Array of Neutron Detectors at Low Energies (VANDLE), F. Raiola *et al*., presented at the 3rd Joint Meeting of the APS Division of Nuclear Physics and the Physical Society of Japan, Waikoloa, HI, October 2009.

Development of digital electronics for VANDLE, M. Madurga *et al*., presented at the 3rd Joint Meeting of the APS Division of Nuclear Physics and the Physical Society of Japan, Waikoloa, HI, October 2009.

Analysis of ^{26}Al+p elastic and inelastic scattering reactions in inverse kinematics at HRIBF, S. T. Pittman *et al*., presented at the 3rd Joint Meeting of the APS Division of Nuclear Physics and the Physical Society of Japan, Waikoloa, HI, October 2009.

Development of a large acceptance, tracking gas ionization counter, C. Dupuis *et al*., presented at the 3rd Joint Meeting of the APS Division of Nuclear Physics and the Physical Society of Japan, Waikoloa, HI, October 2009.

Development of an Automated Target Oscillator for use in Reaction Studies, W. Martin *et al*., presented at the 3rd Joint Meeting of the APS Division of Nuclear Physics and the Physical Society of Japan, Waikoloa, HI, October 2009.

Performance of a 2m prototype neutron detector for VANDLE, C. Pangan *et al*., presented at the 3rd Joint Meeting of the APS Division of Nuclear Physics and the Physical Society of Japan, Waikoloa, HI, October 2009.

Implanted helium targets for use in inverse kinematics, J. L. Wheeler *et al*., presented at the 3rd Joint Meeting of the APS Division of Nuclear Physics and the Physical Society of Japan, Waikoloa, HI, October 2009.

Neutron transfer measurements around the N=82 shell closure, S. D. Pain *et al*., presented at the 8th International Conference on Radioactive Nuclear Beams (RNB8), Grand Rapids, MI, May 2009.

Proton transfer to unbound ^{19}Ne states and the ^{18}F(p,□)^{15}O reaction rate, A. S. Adekola *et al*., presented at the 8th International Conference on Radioactive Nuclear Beams (RNB8), Grand Rapids, MI, May 2009.

VANDLE: The versatile array of neutron detectors at low energy, C. Matei *et al*., presented at the 8th International Conference on Radioactive Nuclear Beams (RNB8), Grand Rapids, MI, May 2009.

Direct study of the astrophysically important ^{17}F(p,□)^{18}Ne reaction, K. A. Chipps *et al*., presented at the 8th International Conference on Radioactive Nuclear Beams (RNB8), Grand Rapids, MI, May 2009.

Single-particle structure of ^{133}Sn explored through the ^{132}Sn(d,p) reaction in inverse kinematics, K. L. Jones *et al*., presented at the April Meeting of the APS, Denver, CO, May 2009.

Commissioning of the windowless gas target at ORNL's Holifield Radioactive Ion Beam Facility, B. H. Moazen *et al*., presented at the April Meeting of the APS, Denver, CO, May 2009.

Spin assignments of ^{22}Mg levels through a ^{24}Mg(p,t)^{22}Mg measurement, K. Y. Chae *et al*., presented at the April Meeting of the APS, Denver, CO, May 2009.

Direct measurement of low-energy resonances in ^{31}P(p,□)^{28}Si and ^{35}Cl(p,□)^{32}S, C. Matei *et al*., presented at the April Meeting of the APS, Denver, CO, May 2009.

First direct measurement of the resonant ^{17}F(p,□)^{18}Ne reaction rate, K. A. Chipps et *al*., presented at the April Meeting of the APS, Denver, CO, May 2009.

Target implantation for inverse (^{3}He,d) reaction studies, D. J. Sissom *et al*., presented at the DNP meeting, Oakland, CA, October 2008.

CLEAR: Prospects for a low threshold neutrino experiment at the SNS, J. Nikkel *et al*., presented at the DNP meeting, Oakland, CA, October 2008.

Fortran simulation of Wien velocity filters in the Daresbury Recoil Separator at the HRIBF, J. P. Rogers *et al*., presented at the DNP meeting, Oakland, CA, October 2008.

Excitation energies of the unbound states in ^{32}Cl studied via the ^{32}S(^{3}He,t)^{32}Cl charge exchange reaction, M. Matos *et al*., presented at the DNP meeting, Oakland, CA, October 2008.

New Measurements of spectroscopic factors for low-lying ^{16}N levels, P. D. O'Malley *et al*., presented at the DNP meeting, Oakland, CA, October 2008.

^{25}Al levels observed in the ^{28}Si(p,α)^{25}Al reaction, S. T. Pittman *et al*., presented at the DNP meeting, Oakland, CA, October 2008.

Measurement of Low Energy Resonances in ^{31}P(p,□)^{28}Si, B. H. Moazen *et al*., presented at the DNP meeting, Oakland, CA, October 2008.

Using (d,pγ) reactions as a surrogate for neutron capture with ^{75}As, W. A. Peters *et al*., presented at the DNP meeting, Oakland, CA, October 2008.

The Development of a Versatile Array of Neutron Detectors at Low Energy, C. Matei *et al*., presented at the DNP meeting, Oakland, CA, October 2008.

Surrogate reactions on fission fragments for nuclear energy, R. Hatarik *et al*., presented at the DNP meeting, Oakland, CA, October 2008.

First direct measurement of the ^{17}F(p,γ)^{18}Ne cross section, K. A. Chipps *et al*., presented at the DNP meeting, Oakland, CA, October 2008.

Measurement of the 330 keV resonance in ^{18}F(p,γ)^{15}O, B. H. Moazen *et al*., presented at the 5th International Conference on Exotic Nuclei and Atomic Masses, Ryn, Poland, September 2008.

Studies of nuclei close to ^{132}Sn using single-neutron transfer reactions, K. L. Jones *et al.,* presented at the International Conference on New Aspects of Heavy-ion Collisions near the Coulomb Barrier, Chicago, IL, September 2008.

Measurement of the 330 keV resonance in ^{18}F(p,γ)^{15}O, B. H. Moazen *et al*., presented at the Zakopane Conference on Nuclear Physics, Zakopane, Poland, September 2008.

Neutron transfer reactions on neutron-rich N=50 and N=82 nuclei near the r-process path, J. A. Cizewski *et al*., presented at the 13th International Symposium on Capture Gamma-Ray Spectroscopy and Related Topics, Cologne, Germany, August 2008.

First Direct Measurement of the ^{17}F(p,γ)^{18}Ne Cross Section, K. A. Chipps *et al*., presented at the 13th International Symposium on Capture Gamma-Ray Spectroscopy and Related Topics, Cologne, Germany, August 2008.

The Development of a Versatile Array of Neutron Detectors at Low Energy, C. Matei *et al*., presented at the 20th International Conference on the Application of Accelerators in Research & Industry, Fort Worth, TX, August 2008.

Searching for resonances in the unbound ^{6}Be nucleus, K. Y. Chae *et al*., presented at the 20th International Conference on the Application of Accelerators in Research & Industry, Fort Worth, TX, August 2008.

Neutron transfer measurements around the mass 132 region, S. D. Pain *et al.,* presented at the 10th Symposium on Nuclei in the Cosmos, Mackinac Island, MI, July 2008.

Astrophysically important ^{19}Ne states studied with the ^{2}H(^{18}F,γ+^{15}O)n Reaction, A. S. Adekola *et al.,* presented at the 10th Symposium on Nuclei in the Cosmos, Mackinac Island, MI, July 2008.

An analysis of ^{25}Al energy levels observed in the ^{28}Si(p, α)^{25}Al reaction, S. T. Pittman *et al.,* presented at the 10th Symposium on Nuclei in the Cosmos, Mackinac Island, MI, July 2008.

A novel technique for measuring narrow-resonance (p,α) reactions, B. H. Moazen *et al.,* presented at the 10th Symposium on Nuclei in the Cosmos, Mackinac Island, MI, July 2008.

The Versatile Array of Neutron Detectors at Low Energy (VANDLE), C. Matei *et al.,* presented at the 10th Symposium on Nuclei in the Cosmos, Mackinac Island, MI, July 2008.

Spin assignments of ^{22}Mg through a ^{24}Mg(p,t)^{22}Mg measurement, K. Y. Chae *et al.,* presented at the 10th Symposium on Nuclei in the Cosmos, Mackinac Island, MI, July 2008.

Neutron single particle structure in ^{131}Sn and the r-process, R. L. Kozub *et al.,* presented at the 10th Symposium on Nuclei in the Cosmos, Mackinac Island, MI, July 2008.

First Measurement of the ^{17}F(p,γ)^{18}Ne Cross Section, K. A. Chipps *et al.,* presented at the 10th Symposium on Nuclei in the Cosmos, Mackinac Island, MI, July 2008.

Using (d,pγ) reactions as a surrogate for neutron capture with radiochemical As isotopes, W. A. Peters *et al*., presented at the Nuclear Chemistry Gordon Research Conference, New London, NH, June 2008.

Neutron-Transfer Reaction Studies with Radioactive Fission Fragment Beams, J. A. Cizewski *et al*., presented at the 9th International Conference on the Application of Nuclear Techniques, Crete, Greece, June 2008.

Spin assignments of ^{22}Mg through a ^{24}Mg(p,t)^{22}Mg measurement, K. Y. Chae *et al*., presented at the April Meeting of the American Physical Society, St. Louis, MO, April 2008.

Effects on ^{18}F production in novae from changes in the ^{17}O(p,α)^{14}N rate, B. H. Moazen *et al*., presented at the April Meeting of the American Physical Society, St. Louis, MO, April 2008.

ORNL Radioactive Beams for Stellar Explosion Studies, M. S. Smith *et al*., presented at the 10th International Symposium on Origin of Matter and Evolution of Galaxies, Sapporo, Japan, December 2007.

Development of ORRUBA - A Silicon Array for the Measurement of Transfer Reactions in Inverse Kinematics, S. D. Pain *et al*., presented at the Fourth International Conference on Fission and Properties of Neutron-rich Nuclei, Sanibel Island, FL, November 2007.

Single Neutron Structure of Neutron-Rich Nuclei Near ^{132}Sn, J. A. Cizewski *et al*., presented at the Fourth International Conference on Fission and Properties of Neutron-rich Nuclei, Sanibel Island, FL, November 2007.

Search for the states in ^{8}B via ^{7}Be + d, L. Segen *et al*., presented at the Division of Nuclear Physics Meeting (DNP), Newport News, VA, October 2007.

Structure of ^{8}B through ^{7}Be+p scattering, J. C. Blackmon *et al*., presented at the Division of Nuclear Physics Meeting (DNP), Newport News, VA, October 2007.

Measurement of the ^{134}Te(d,p)^{135}Te reaction in inverse kinematics, S. D. Pain *et al*., presented at the Division of Nuclear Physics Meeting (DNP), Newport News, VA, October 2007.

Single particle states in ^{131}Sn and the r-process, R. L. Kozub *et al*., presented at the Division of Nuclear Physics Meeting (DNP), Newport News, VA, October 2007.

The ^{17}O(p,α)^{14}N reaction measured using a novel technique, B. H. Moazen *et al*., presented at the Division of Nuclear Physics Meeting (DNP), Newport News, VA, October 2007.

Searching for resonances in the unbound ^{6}Be nucleus, K. Y. Chae *et al*., presented at the Division of Nuclear Physics Meeting (DNP), Newport News, VA, October 2007.

Investigation of Plastic Scintillator Detector Configurations for Neutron Studies, C. Matei *et al*., presented at the Division of Nuclear Physics Meeting (DNP), Newport News, VA, October 2007.

The single-particle states in ^{133}Sn studied through the ^{132}Sn(d,p) reaction, K. L. Jones *et al*., presented at the Division of Nuclear Physics Meeting (DNP), Newport News, VA, October 2007.

Single-neutron structure of neutron-rich nuclei near ^{132}Sn, K. L. Jones *et al*., presented at the International Nuclear Physics Conference, Tokyo, Japan, June 2007.

Radioactive beams & software tools for frontier stellar explosions studies, M. S. Smith for the RIBENS Collaboration, presented at the International Nuclear Physics Conference, Tokyo, Japan, June 2007.

Using ^{171,173}Yb(d, p) to benchmark a surrogate ratio for neutron capture, R. Hatarik *et al*., presented at the April Meeting of the American Physical Society, Jacksonville, FL, April 2007.

Measurement of the ^{134}Te(d,p)^{135}Te reaction in inverse kinematics, S. D. Pain *et al*., presented at the April Meeting of the American Physical Society, Jacksonville, FL, April 2007.

The ^{130}Sn(d,p)^{131}Sn reaction in inverse kinematics, R. L. Kozub *et al*., presented at the April Meeting of the American Physical Society, Jacksonville, FL, April 2007.

Studies of level structure of ^{19}Ne through measurement of the proton-transfer ^{2}H(^{18}F,α + ^{15}O)n reaction, A. S. Adekola *et al*., presented at the April Meeting of the American Physical Society, Jacksonville, FL, April 2007.

Tests of a cryogenic gas cell for radioactive ion beam experiments, K. Chipps *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Nashville, TN, October 2006.

First experimental constraints on the interference of 3/2$^+$ resonances in the ^{18}F(p,α)^{15}O reaction, K. Y. Chae *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Nashville, TN, October 2006.

The ^{17}O(p,α)^{14}N reaction measured using a novel technique, B. H. Moazen *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Nashville, TN, October 2006.

A new ^{30}P(p,γ)^{31}S reaction rate and its astrophysical implications, Z. Ma *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Nashville, TN, October 2006.

Measurement of ^{7}Be+p elastic and inelastic scattering, R. J. Livesay *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Nashville, TN, October 2006.

Benchmarking (d,pγ) as surrogate reaction for (n,γ), R. Hatarik *et al.*, presented at the Fall Meeting of the Division of Nuclear Physics, Nashville, TN, October 2006.

Development of the Oak Ridge Rutgers University Barrel Array, S. D. Pain *et al*., presented at the Fall Meeting of the Division of Nuclear Physics, Nashville, TN, October 2006.

Results from (d,p) measurements in inverse kinematics at the HRIBF, K. L. Jones and R. L. Kozub for the ORRUBA and RIBENS collaborations, presented at the Fall Meeting of the Division of Nuclear Physics, Nashville, TN, October 2006.

First experimental constraints on the interference of $3/2^+$ resonances in the $^{18}F(p,\alpha)^{15}O$ reaction, K. Y. Chae *et al.*, presented at the HRIBF Workshop on Nuclear Measurements for Astrophysics, Oak Ridge, TN, October 2006.

Understanding r-process nuclei using the (d,p) reaction on exotic beams, K. L. Jones *et al*., presented at the HRIBF Workshop on Nuclear Measurements for Astrophysics, Oak Ridge, TN, October 2006.

Study of unbound ^{19}Ne states via the proton transfer reaction $^2H(^{18}F,\alpha+^{15}O)n$, C. R. Brune *et al*., presented at the HRIBF Workshop on Nuclear Measurements for Astrophysics, Oak Ridge, TN, October 2006.

The structure of ^8B through measurement of ^7Be+p scattering, R. J. Livesay *et al*., presented at the HRIBF Workshop on Nuclear Measurements for Astrophysics, Oak Ridge, TN, October 2006.

Single neutron transfer experiments close to the r-process line, K. L. Jones *et al.*, presented at the Zakopane Conference on Nuclear Physics, Zakopane, Poland, September 2006.

(d,pγ) Reactions and the Surrogate Reaction Technique, J.A. Cizewski *et al.*, presented at the 19th International Conference on the Application of Accelerators in Research and Industry, Ft. Worth, Texas, August 2006.

Excited states in ^{22}Mg via the $^{12}C(^{12}C,2n)^{22}Mg$ reaction, C. Jewett *et al*., presented at the 19th International Conference on the Application of Accelerators in Research and Industry, Ft. Worth, Texas, August 2006.

Recent results of experiments with radioactive ^{21}Na and ^7Be ion beams, U. Greife *et al*., presented at the 19th International Conference on the Application of Accelerators in Research and Industry, Ft. Worth, Texas, August 2006.

Development of a high solid-angle silicon detector array for measurement of transfer reactions in inverse kinematics, S. D. Pain *et al.*, presented at the 19th International Conference on the Application of Accelerators in Research and Industry, Ft. Worth, Texas, August 2006.

Astrophysically important ^{31}S states studied with the $^{32}S(p,d)^{31}S$ reaction, Z. Ma *et al*., presented at Nuclear Structure 2006, Oak Ridge, TN, July 2006.

Measurement of Transfer Reactions on Fission Fragments in Inverse Kinematics, S. D. Pain *et al*., presented at Nuclear Structure 2006, Oak Ridge, TN, July 2006.

The structure of ^{8}B through measurement of ^{7}Be+p scattering, R. J. Livesay *et al*., presented at Nuclear Structure 2006, Oak Ridge, TN, July 2006.

Neutron-transfer Reactions with Neutron-Rich Radioactive Nuclear Beams, J.A. Cizewski *et al*., presented at Radioactive Nuclear Beams 7, Cortina d'Ampezzo, Italy, July 2006.

Study of unbound ^{19}Ne states via the proton transfer reaction ^{2}H(^{18}F,α+^{15}O)n, A. Adekola *et al*., presented at Nuclei in the Cosmos 9, Geneva, Switzerland, June 2006.

Studies of radioactive nuclei and their role in the Cosmos, J. C. Blackmon for the RIBENS Collaboration, presented at Nuclei in the Cosmos 9, Geneva, Switzerland, June 2006.

First experimental constraints on the interference of 3/2^{+} resonances in the ^{18}F(p,α)^{15}O reaction, K. Y. Chae *et al*., presented at Nuclei in the Cosmos 9, Geneva, Switzerland, June 2006.

New features of the Computational Infrastructure for Nuclear Astrophysics, M. S. Smith *et al*., presented at Nuclei in the Cosmos 9, Geneva, Switzerland, June 2006.

Measurement of transfer reactions on neutron-rich fission fragments in inverse kinematics, S. D. Pain *et al*., presented at Nuclei in the Cosmos 9, Geneva, Switzerland, June 2006.

Neutrino-nucleus cross sections and their role in supernovae, J. C. Blackmon *for the vSNS collaboration*, presented at Nuclei in the Cosmos 9, Geneva, Switzerland, June 2006.

Proton-transfer study of unbound ^{19}Ne states via ^{2}H(^{18}F,α+^{15}O)n, C. R. Brune *et al*., presented at the April Meeting of the APS, Dallas, Texas, April 2006.

Astrophysics at RIA (ARIA) Working Group, M. S. Smith *et al*. (for the ARIA working group), presented at the International Symposium on the Origin of Matter and Evolution of Galaxies (OMEG05), Tokyo, Japan, November 2005.

Computational Infrastructure for Nuclear Astrophysics, M. S. Smith *et al*., presented at the International Symposium on the Origin of Matter and Evolution of Galaxies (OMEG05), Tokyo, Japan, November 2005.

Neutrino-nucleus cross sections and their role in supernovae, J. C. Blackmon (for the v-SNS collaboration), presented at the Division of Nuclear Physics Meeting (DNP), Maui, Hawaii, September 2005.

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Measurement of Transfer Reactions on Z=50 Fission Fragments in Inverse Kinematics, S. D. Pain *et al.*, presented at the Division of Nuclear Physics Meeting (DNP), Maui, Hawaii, September 2005.

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