

## **ORNL Physics Division**

### **PRESENTATIONS AT SCIENTIFIC MEETINGS**

October 1996 - September 1998

#### **1996**

##### **American Physical Society, Division of Nuclear Physics, Cambridge, Mass., Oct. 2-5, 1996**

Akovali, Y. A.

"Review of Alpha Decay Data from Doubly-Even Nuclei," *Bull. Am. Phys. Soc.* **41**, 1228 (Oct. 1996)

Batchelder, J. C., E. F. Zganjar, K. S. Toth, C. R. Bingham, J. Wauters, C. N. Davids, D. S. Seweryniak, D. J. Blumenthal, P. J. Woods, R. J. Irvine, T. Davinson, L. F. Conticchio, W. B. Walters, and L. T. Brown  
"Study of  $^{186}\text{Bi}$   $\alpha$ -Decay," *Bull. Am. Phys. Soc.* **41**, 1229 (Oct. 1996)

Gan, N., J. R. Beene, M. L. Halbert, D. W. Stracener, R. L. Varner, A. Azhari, E. Ramakrishnan, P. Thirolf, M. Thoennessen, and S. Yokoyana

"Photon Decay Following the Projectile Excitation of  $^{11}\text{Be}$ ," *Bull. Am. Phys. Soc.* **41**, 1233 (Oct. 1996)

Guber, K. H., J. A. Harvey, N. W. Hill, P. Riehs, S. Kopecky, and R. R. Winters

"New High Precision Transmission Measurements on  $^{208}\text{Pb}$  at ORELA and Their Impact on the Electric Polarizability of the Neutron," *Bull. Am. Phys. Soc.* **41**, 1236 (Oct. 1996)

Toth, K. S., J. C. Batchelder, E. F. Zganjar, C. R. Bingham, J. Wauters, C. N. Davids, D. S. Seweryniak, R. J. Irvine, L. F. Conticchio, W. B. Walters, and L. T. Brown

"The  $\alpha$ -Decay Properties of  $^{180,182,184}\text{Pb}$ ," *Bull. Am. Phys. Soc.* **41**, 1229 (Oct. 1996)

Varner, R. L., J. R. Beene, N. Gan, D. H. Olive, D. W. Stracener

"Giant Resonance Studies with the ORNL-TAMU-MSU BaF<sub>2</sub> Detector Array," *Bull. Am. Phys. Soc.* **41**, 1222 (Oct. 1996)

##### **Ninth International Symposium on Capture Gamma-Ray Spectroscopy and Related Topics, Budapest, Hungary, Oct. 8-12, 1996**

Akovali, Y. A. (Invited Presentation)

"Review of Alpha-Decay Data and Nuclear-Structure Information"

Raman, S. (Invited Presentation)

"Thermal-Neutron Capture in Light Nuclei"

##### **Conference on Large Scale Collective Motion of Atomic Nuclei, Brolo, Italy, Oct. 14-19, 1996**

D'Onofrio, A., F. Terrasi, L. Campajola, A. De Rosa, G. Inglima, M. La Commara, D. Pierroutsakou, M. Romoli, V. Roca, M. Romano, M. Sandoli, J. Gomez del Campo, D. Shapira, J. R. Beene, E. Chavez, M. E. Ortiz, and A. Dacal

"Effective Temperatures in Complete Fusion for the System  $^{58}\text{Ni} + ^{58}\text{Ni}$  at 500 MeV Bombarding Energy"

Gomez del Campo, J. (Invited Presentation)  
"Emission of Complex Fragments for Compound Nuclei Formed Far from the Stability Line for A ~120"

**1996 Symposium of Northeastern Accelerator Personnel (SNEAP-96), Woods Hole, Mass., Oct. 27-30, 1996**

Jones, N. L.  
"EN Tandem at ORNL"

Jones, N. L.  
"A New Control System for an Old Tandem"

Meigs, M. J., D. L. Haynes, and R. C. Jurus  
"Oak Ridge 25URC Tandem Accelerator"

**1996 IEEE Nuclear Science Symposium, Anaheim, Calif., Nov. 4-8, 1996**

Britton, C. L., W. L. Bryan, M. S. Emery, M. N. Ericson, M. S. Musrock, M. L. Simpson, J. W. Walker, A. L. Wintenberg, G. R. Young, M. D. Allen, L. G. Clonts, E. J. Kennedy, R. S. Smith, J. Boissevain, B. V. Jacak, J. S. Kapustinsky, J. Simon-Gillo, J. P. Sullivan, H. Van Hecke, and N. Xu  
"Design and Performance of Custom Integrated Electronics for the PHENIX Multiplicity Detector"

Emery, M. S., S. S. Frank, C. L. Britton, A. L. Wintenberg, M. L. Simpson, M. N. Ericson, and G. R. Young  
"A 12-Bit Multichannel ADC for Use in the PHENIX Detector"

Ericson, M. N., M. D. Allen, M. S. Musrock, J. W. Walker, C. L. Britton, A. L. Wintenberg, and G. R. Young  
"Development of Front End Controller/HEAP Manager for PHENIX"

Ericson, M. N., C. L. Britton, M. S. Emery, M. S. Musrock, D. E. Smith, G. R. Young, J. Boissevain, J. S. Kapustinsky, J. Simon-Gillo, J. P. Sullivan, H. Van Hecke, S. F. Hahn, M. D. Allen, and R. E. Lind (Invited Presentation)

"Front-End Module Readout and Control Electronics for the PHENIX Multiplicity Detector "

Simpson, M. L., C. L. Britton, W. L. Bryan, U. Jagadish, G. R. Young, R. S. Smith, E. J. Kennedy, B. V. Jacak, J. Kapustinsky, and A. Oskarsson  
"A Discriminator with a Current-Sum Multiplicity Output for the PHENIX Multiplicity Vertex Detector"

Simpson, M. L., A. L. Wintenberg, G. R. Young, R. G. Jackson, and T. V. Blalock  
"Integrated Constant-Fraction Discriminator Shaping Techniques for the PHENIX Calorimeters"

Wintenberg, A. L., M. L. Simpson, G. R. Young, R. L. Palmer, and R. G. Jackson  
"A CMOS Variable Gain Amplifier for PHENIX Electromagnetic Calorimeter and RICH Energy Measurements"

**14th International Conference on the Application of Accelerators in Research and Industry, Denton, Texas, Nov. 6-9, 1996**

Alton, G. D. (Invited Presentation)  
"Advanced Target Concepts for RIB Generation"

Alton, G. D. , J. W. Middleton, and J. R. Beene (Invited Presentation)  
"The Development of Highly Permeable Targets with Short Diffusion Lengths for Generation of Radioactive Ion Beams"

Batchelder, J. C., E. F. Zganjar, K. S. Toth, C. R. Bingham, J. Wauters, C. N. Davids, D. S. Seweryniak, R. J. Irvine, W. B. Walters, L. F. Conticchio, and L. T. Brown (Invited Presentation)  
"Behavior of Intruder Based States in Light Bi and Tl Isotopes: The Study of  $^{187}\text{Bi}$   $\alpha$  Decay"

Beene, J. R. (Invited Presentation)  
"The Holifield Radioactive Ion Beam Facility"

Bingham, C. R., J. Wauters, B. E. Zimmerman, K. S. Toth, J. C. Batchelder, E. F. Zganjar, D. J. Blumenthal, C. N. Davids, D. J. Henderson, D. Seweryniak, L. T. Brown, B. C. Busse, L. F. Conticchio, W. B. Walters, T. Davinson, R. J. Irvine, and P. J. Woods (Invited Presentation)  
"Investigation of Short-Lived Pt and Pb  $\alpha$  Emitters Near the Proton Drip Line"

Blackmon, J. C. (Invited Presentation)  
"Nuclear Astrophysics at the Holifield Radioactive Ion Beam Facility"

Garrett, J. D. (Invited Presentation)  
"Accelerated Beams of Radioactive Ions: New Research Opportunities for Nuclear Structure, Nuclear Astrophysics, and Materials Science"

Gross, C. J. (Invited Presentation)  
"Commissioning of the HRIBF Recoil Mass Spectrometer"

Lohwasser, R., G. D. Alton, and R. F. Welton  
"High-Q RF Antenna Systems for Efficient Plasma Generation"

Macek, J. H.  
"Wave Functions for Double Electron Escape and Wannier-Type Threshold Laws"

Middleton, J. W., G. D. Alton, and J. R. Beene (Invited Presentation)  
"The Computational Design of the Radioactive Ion Beam Target/Heat-Sink Assembly at the Holifield Radioactive Ion Beam Facility"

Stracener, D. W., H. K. Carter, J. Kormicki, A. H. Poland, M. S. Smith, J. C. Blackmon, and D. W. Bardayan (Invited Presentation)  
"Studies on the Production and Release of F and As Isotopes from the HRIBF Target/Ion Source"

Toth, K. S., J. C. Batchelder, E. F. Zganjar, C. R. Bingham, J. Wauters, T. Davinson, J. McKenzie, and P. J. Woods (Invited Presentation)  
"Investigating Particle Emitters at the Limits of Stability with Radioactive Beams from the Oak Ridge Facility"

Ward, S. J., J. H. Macek, and S. Y. Ovchinnikov  
"The Hidden Crossing Theory Applied to Positronium Formation"

Welton, R. F., G. D. Alton, and S. N. Murray (Invited Presentation)  
"Ionization Efficiency and Delay Time Characterization of New Concept Ion Sources for RIB Generation"

Wu, W. (Invited Presentation)  
"Double Ionization of He by Fast Protons at Large Energy Transfer"

**American Physical Society, Southeastern Section, Decatur, Ga., Nov. 14-16, 1996**

Gross, C. J. (Invited Presentation)  
"Nuclear Structure Near the  $N = Z$  Line in the  $A = 80$  Region," *Bull. Am. Phys. Soc.* **41**, 1661 (Nov. 1996)

**Symposium on Beam Engineering of Advance Materials Synthesis, Tokyo, Japan, Nov. 18-22, 1996**

Alton, G. D. (Invited Presentation)  
"The Sputter Generation of Negative Ion Beams"

**18th Texas Symposium on Relativistic Astrophysics, Chicago, Ill., Dec. 15-20, 1996**

Mezzacappa, A.  
"Simulations of Core Collapse Supernovae in One and Two Dimensions Using Multigroup Neutrino Transport"

**1997**

**XX Nuclear Physics Symposium, Oaxtepec, Mexico, Jan. 6-9, 1997**

Dean, D. J. (Invited Presentation)  
"Shell-Model Monte Carlo Studies of Nuclei"

**Thirteenth Winter Workshop on Nuclear Dynamics, Marathon, Fla., Feb. 1-8, 1997**

Stankus, P. W. (Invited Presentation)  
"Recent Results from CERN WA98"

**German Physical Society, Gottingen, Germany, Feb. 24-28, 1997**

Rudolph, D., C. Baktash, M. J. Brinkman, M. Devlin, H.-Q. Jin, D. R. LaFosse, M. Leddy, I. Y. Lee, A. O. Macchiavelli, L. L. Riedinger, D. G. Sarantites, and C. H. Yu  
"High-Spin Gamma-Ray Spectroscopy in the Vicinity of  $^{56}\text{Ni}$ "

**13th International Workshop on ECR Ion Sources, College Station, Texas, Feb. 26-28, 1997**

Meyer, F. W. (Invited Presentation)  
"ECR-Based Atomic Collision Physics Research at ORNL"

**U.S.-Latin American Seminar on Atomic Collisions, Rosario, Argentina, Mar. 17-19, 1997**

Reinhold, C. O., J. Burgdorfer, M. T. Frey, and F. B. Dunning (Invited Presentation)  
"Creating and Probing Coherent Atomic States"

**International Conference on Physics and Astrophysics of Quark Gluon Plasma, Jaipur, India, Mar. 17-21, 1997**

Awes, T. C. (For the WA98 Collaboration) (Invited Presentation)  
M. Aggarwal, A. Agnihotri, Z. Ahammed, A.L.S. Angelis, V. Antonenko, V. Arefiev, V. Astakhov, V. Avdeitchikov, T. C. Awes, P.V.K.S. Baba, S. K. Badyal, A. Baldine, L. Barabach, C. Barlag, S. Bathe, B. Batiounia, T. Bernier, K. B. Bhalla, V. S. Bhatia, C. Blume, D. Bock, R. Bock, E.-M. Bohne, D. Bucher, A. Buijs, E.-J. Buis, H. Busching, L. Carlen, V. Chalyshev, S. Chattopadhyay, K. E. Chenawi, R. Cherbatchev, T. Chujo, A. Claussen, A. C. Das, M. P. Decowski, V. Djordjadze, P. Donni, I. Doubrovik, M. R. Dutta Majumdar, S. Eliseev, K. Enosawa, H. Feldman, P. Foka, S. Fokin, V. Frolov, M. S. Ganti, S. Garpman, O. Gavrilchuk, F.J.M. Geurts, T. K. Ghosh, R. Glasow, S. K. Gupta, B. Guskov, H.-A. Gustafsson, H. H. Gutbrod, R. Higuchi, I. Hrivnacova, M. Ippolitov, H. Kalechofsky, R. Kamermans, K. H. Kampert, K. Karadjev, K. Karpio, S. Kato, S. Kees, H. Kim, B. W. Kolb, I. Kosarev, I. Koutcheryaev,

A. Kugler, P. Kulinich, V. Kumar, M. Kurata, K. Kurita, N. Kuzmin, I. Langbein, A. Lebedev, Y. Y. Lee, H. Loehner, D. P. Mahapatra, V. Manko, M. Martin, A. Maximov, R. Mehdiyev, G. Mgebrichvili, Y. Miake, D. Mikhalev, G. C. Mishra, Y. Miyamoto, D. Morrison, D. S. Mukhopadhyay, V. Myalkovski, H. Naef, B. K. Nandi, S. K. Nayak, T. K. Nayak, S. Neumaier, A. Nianine, V. Nikitine, S. Nikolaev, S. Nishimura, P. Nomokov, J. Nystrand, F. E. Obenshain, A. Oskarsson, I. Otterlund, M. Pachr, A. Parfenov, S. Pavliouk, T. Peitzmann, V. Petracek, F. Plasil, M. L. Purschke, B. Raeven, J. Rak, S. Raniwala, V. S. Ramamurthy, N. K. Rao, F. Retiere, K. Reygers, G. Roland, L. Rosselet, I. Roufanov, J. Rubio, S. S. Sambyal, R. Santo, S. Sato, H. Schlagheck, H. R. Schmidt, G. Shabratova, I. Sibariak, T. Siemiarczuk, B. C. Sinha, N. Slavine, K. Soderstrom, N. Solomey, S. P. Sorensen, P. Stankus, G. Stefanek, P. Steinberg, E. Stenlund, D. Stueken, M. Sumbera, T. Svensson, M. D. Trivedi, A. Tsvetkov, C. Twenhoefel, L. Tykarski, J. Urbahn, N. Van Eijndhoven, W. H. Van Heeringen, G. J. Van Nieuwenhuizen, A. Vinogradov, Y. P. Viyogi, A. Vodopianov, M. A. Vos, B. Wyslouch, K. Yagi, Y. Yokota, and G. R. Young

"Electromagnetic Signatures of QGP (Photons): Experimental Status"

Nayak, T. K. (For the WA98 Collaboration) (Invited Presentation)

M. Aggarwal, A. Agnihotri, Z. Ahammed, A.L.S. Angelis, V. Antonenko, V. Arefiev, V. Astakhov, V. Avdeitchikov, T. C. Awes, P.V.K.S. Baba, S. K. Badyal, A. Baldine, L. Barabach, C. Barlag, S. Bathe, B. Batiounia, T. Bernier, K. B. Bhalla, V. S. Bhatia, C. Blume, D. Bock, R. Bock, E.-M. Bohne, D. Bucher, A. Buijs, E.-J. Buis, H. Busching, L. Carlen, V. Chalyshev, S. Chattopadhyay, K. E. Chenawi, R. Cherbatchev, T. Chujo, A. Claussen, A. C. Das, M. P. Decowski, V. Djordjadze, P. Donni, I. Doubovik, M. R. Dutta Majumdar, S. Eliseev, K. Enosawa, H. Feldman, P. Foka, S. Fokin, V. Frolov, M. S. Ganti, S. Garpman, O. Gavrishchuk, F.J.M. Geurts, T. K. Ghosh, R. Glasow, S. K. Gupta, B. Guskov, H.-A. Gustafsson, H. H. Gutbrod, R. Higuchi, I. Hrvnacova, M. Ippolitov, H. Kalechofsky, R. Kamermans, K. H. Kampert, K. Karadjev, K. Karpio, S. Kato, S. Kees, H. Kim, B. W. Kolb, I. Kosarev, I. Koutcheryaev, A. Kugler, P. Kulinich, V. Kumar, M. Kurata, K. Kurita, N. Kuzmin, I. Langbein, A. Lebedev, Y. Y. Lee, H. Loehner, D. P. Mahapatra, V. Manko, M. Martin, A. Maximov, R. Mehdiyev, G. Mgebrichvili, Y. Miake, D. Mikhalev, G. C. Mishra, Y. Miyamoto, D. Morrison, D. S. Mukhopadhyay, V. Myalkovski, H. Naef, B. K. Nandi, S. K. Nayak, T. K. Nayak, S. Neumaier, A. Nianine, V. Nikitine, S. Nikolaev, S. Nishimura, P. Nomokov, J. Nystrand, F. E. Obenshain, A. Oskarsson, I. Otterlund, M. Pachr, A. Parfenov, S. Pavliouk, T. Peitzmann, V. Petracek, F. Plasil, M. L. Purschke, B. Raeven, J. Rak, S. Raniwala, V. S. Ramamurthy, N. K. Rao, F. Retiere, K. Reygers, G. Roland, L. Rosselet, I. Roufanov, J. Rubio, S. S. Sambyal, R. Santo, S. Sato, H. Schlagheck, H. R. Schmidt, G. Shabratova, I. Sibariak, T. Siemiarczuk, B. C. Sinha, N. Slavine, K. Soderstrom, N. Solomey, S. P. Sorensen, P. Stankus, G. Stefanek, P. Steinberg, E. Stenlund, D. Stueken, M. Sumbera, T. Svensson, M. D. Trivedi, A. Tsvetkov, C. Twenhoefel, L. Tykarski, J. Urbahn, N. Van Eijndhoven, W. H. Van Heeringen, G. J. Van Nieuwenhuizen, A. Vinogradov, Y. P. Viyogi, A. Vodopianov, M. A. Vos, B. Wyslouch, K. Yagi, Y. Yokota, and G. R. Young

"Search for Disoriented Chiral Condensates: An Experimental Perspective"

**ACS Symposium, Nuclear Structure with Large Gamma-Ray Detector Arrays and Their Auxiliary Devices, Dallas, Texas, Mar. 30-Apr. 1, 1997**

Radford, D. C.

"Four-Fold Coincidence Data Analysis in Radware"

**American Chemical Society Meeting, San Francisco, Calif., Apr. 13-17, 1997**

Akovali, Y. A. (Invited Presentation)

"Evaluation of Nuclear Structure Data for the Actinides"

Garrett, J. D. (Invited Presentation)

"First Experiments at the HRIBF"

Garrett, J. D. (Invited Presentation)

"Radioactive Beams — The Research Perspective"

- Nazarewicz, W. (Invited Presentation)  
"Physics of Radioactive Nuclear Beams: Theoretical Perspective"
- Smith, M. S. (Invited Presentation)  
"Nuclear Data Capabilities and Opportunities for Nuclear Astrophysics"
- Toth, K. S. (Invited Presentation)  
"New Alpha Emitters and Planned Charged-Particle Decay Studies Using the HRIBF Recoil Separator"
- American Physical Society, Division of Atomic, Molecular, and Optical Physics,  
Washington, D.C., Apr. 18-21, 1997**
- Bannister, M. E. (Invited Presentation)  
"Resonance Interference in Near-Threshold Excitation Experiments," *Bull. Am. Phys. Soc.* **42**, 1111 (Apr. 1997)
- Bliek, F. W., R. Hoekstra, M. E. Bannister, and C. C. Havener  
"Low Energy Electron Capture by C<sup>4+</sup> Ions from Atomic Hydrogen Using Merged Beams," *Bull. Am. Phys. Soc.* **42**, 1029 (Apr. 1997)
- Datz, S. (Invited Presentation)  
"The Application of Ion Storage Rings to Atomic and Molecular Physics," *Bull. Am. Phys. Soc.* **42**, 902 (Apr. 1997)
- Krstic, P. R.  
"Advances in Multielectron Hidden Crossing Theory," *Bull. Am. Phys. Soc.* **42**, 1028 (Apr. 1997)
- Meyer, F. W., Q. Yan, and P. Zeijlmans van Emmichoven  
"Neutralization of Slow Singly and Multiply Charged Projectiles Grazingly Incident on LiF(100)," *Bull. Am. Phys. Soc.* **42**, 1031 (Apr. 1997)
- Wu, W., and C. C. Havener  
"State-Selective Electron Capture by Si<sup>4+</sup> from D at eV/u Energies Using Merged Beams," *Bull. Am. Phys. Soc.* **42**, 1029 (Apr. 1997)
- Yan, Q. (Invited Presentation)  
"Neutralization of Slow Singly and Multicharged Ions During Grazing Interactions with Metals and Insulators," *Bull. Am. Phys. Soc.* **42**, 1148 (Apr. 1997)
- Meeting of the American Physical Society and the American Association of Physics Teachers, Washington, D.C., Apr. 18-21, 1997**
- Davids, C. N., D. J. Blumenthal, D. J. Henderson, H. T. Penttila, D. J. Seweryniak, P. J. Woods, T. Davinson, R. J. Irvine, J. A. Mackenzie, R. D. Page, J. C. Batchelder, C. R. Bingham, B. E. Zimmerman, L. T. Brown, B. Busse, L. Conticchio, W. B. Walters, J. DeBoer, H. J. Maier, S. J. Freemen, and K. S. Toth  
"Proton Drip-Line Masses and Nuclear Structure from Proton Radioactivities with 73 ≤ Z ≤ 81," *Bull. Am. Phys. Soc.* **42**, 1104 (Apr. 1997)
- Frey, M. T., F. B. Dunning, C. O. Reinhold, and J. Burgdorfer  
"Very-High-n Stark Wavepackets Generated by an Electric Field Step," *Bull. Am. Phys. Soc.* **42**, 964 (Apr. 1997)
- Garrett, J. D.  
"Systematics of Neutron-Proton Correlations in Self Conjugate Nuclei," *Bull. Am. Phys. Soc.* **42**, 977 (Apr. 1997)

Ginter, T. N., J. H. Hamilton, A. V. Ramayya, C. J. Gross, J. W. Johnson, D. Shapira, Y. A. Akovali, M. J. Brinkman, J. Mas, J. W. McConnell, W. T. Milner, and A. N. James  
"Recent Results from the Commissioning of the HRIBF," *Bull. Am. Phys. Soc.* **42**, 995 (Apr. 1997)

Koehler, P. E., R. R. Spencer, K. H. Guber, J. A. Harvey, N. W. Hill, and R. R. Winters  
"High Resolution Neutron Capture and Transmission Measurements and the Stellar Neutron Capture Cross Sections of  $^{116,120}\text{Sn}$ ," *Bull. Am. Phys. Soc.* **42**, 983 (Apr. 1997)

Macek, J. H., and S. Yu. Ovchinnikov  
"Using Electron Distributions to Probe Energy Surfaces at Complex R," *Bull. Am. Phys. Soc.* **42**, 1095 (Apr. 1997)

Minniti, R., S. B. Elston, C. O. Reinhold, J. Y. Lin, and J. Burgdorfer  
"Coincidence Measurements of Convoy Electrons with Specularly Reflected Ions," *Bull. Am. Phys. Soc.* **42**, 1095 (Apr. 1997)

Nazarewicz, W. (Invited Presentation)  
"Collective and Independent-Particle Motion of Nucleons in Nuclei," *Bull. Am. Phys. Soc.* **42**, 904 (Apr. 1997)

Reinhold, C. O., J. Burgdorfer, M. T. Frey, B. E. Tannian, and F. B. Dunning  
"Ionization of Very-High-n Rydberg Atoms by Multiple Half Cycle Pulses in the Short-Pulse Regime," *Bull. Am. Phys. Soc.* **42**, 965 (Apr. 1997)

Rudolph, D., C. Baktash, H.-Q. Jin, C.-H. Yu, C. J. Gross, W. Satula, R. Wyss, M. Devlin, D. R. LaFosse, F. Lerma, D. G. Sarantites, I. Birriel, J. X. Saladin, D. Winchell, V. Wood, G. Sylvan, and S. L. Tabor  
"High-Spin Rotational Bands and Systematics of Even-Even  $T_z - 1$  Nuclei in the  $A = 80$  Region," *Bull. Am. Phys. Soc.* **42**, 978 (Apr. 1997)

Satula, W., D. Dean, J. Gary, S. Mizutori, and W. Nazarewicz  
"Pairing in the  $N \sim Z$  Nuclei," *Bull. Am. Phys. Soc.* **42**, 978 (Apr. 1997)

Schultz, D. R., C. O. Reinhold, and P. S. Krstic  
"Unexpected Oscillations in Intermediate-Energy Ion-Atom Collisions," *Bull. Am. Phys. Soc.* **42**, 1059 (Apr. 1997)

Wong, C. Y., and C. W. Wong  
"Color-Octet Fraction in  $J/\psi$  Absorption," *Bull. Am. Phys. Soc.* **42**, 1127 (Apr. 1997)

**17th Werner Brandt Workshop on Charged Particle Penetration, Charlottesville, Va., May 7-9, 1997**

Krause, H. F., C. R. Vane, S. Datz, P. Grafstrom, H. Knudsen, C. Scheidenberger, and R. H. Schuch  
(Invited Presentation)  
"Electron Capture and Ionization of Pb Ions at 33 TeV"

**Particle Accelerator Conference, Vancouver, Canada, May 12-16, 1997**

Bailey, J. D., and D. K. Olsen  
"A Proposed Superconducting Booster Linac for the HRIBF," *Bull. Am. Phys. Soc.* **42**, 1287 (May 1997)

Tatum, B. A., G. D. Alton, R. L. Auble, J. R. Beene, D. T. Dowling, D. L. Haynes, R. C. Juras, M. J. Meigs, G. D. Mills, S. W. Mosko, P. E. Mueller, D. K. Olsen, D. Shapira, J. W. Sinclair, H. K. Carter, R. F. Welton, C. E. Williams, J. D. Bailey, and D. W. Stracener

"Development of the Holifield Radioactive Ion Beam Facility," *Bull. Am. Phys. Soc.* **42**, 1341 (May 1997)

**International Symposium on Exotic Nuclear Shapes, Debrecen, Hungary, May 12-17, 1997**

Nazarewicz, W. (Invited Presentation)  
"Physics of Radioactive Nuclear Beams: Theoretical Perspective"

**International Conference on Nuclear Data for Science and Technology, Trieste, Italy, May 20-24, 1997**

Bhat, M. R., M. B. Chadwick, and M. S. Smith (Invited Presentation)  
"U.S. Nuclear Reaction Data Program in Support of Basic Research"

Guber, K. H., D. C. Larson, P. E. Koehler, R. R. Spencer, S. Raman, J. A. Harvey, N. W. Hill, T. A. Lewis, and R. R. Winters  
"Experimental Opportunities at the Pulsed Neutron Source ORELA"

Koehler, P. E., R. R. Spencer, K. H. Guber, J. A. Harvey, N. W. Hill, and R. R. Winters  
"High-Resolution Neutron Capture and Transmission Measurements and the Stellar Neutron Capture Cross Sections of  $^{116,120}\text{Sn}$ "

Raman, S., R. L. Walker, and B. D. Murphy  
"Actinide Behavior in the US/UK Actinides Experiment at the Dounreay PFR"

**Sixth Conference on the Intersections of Particle and Nuclear Physics, Big Sky, Mont., May 27-June 2, 1997**

Kamyshkov, Y.  
"Neutron-Antineutron Transition Search at HFIR Reactor"

Stankus, P. W. (Invited Presentation)  
"The Physics of Direct Photon Production in High Energy Heavy Ion Collisions"

**Sixth International Conference on Nucleus-Nucleus Collisions, Gatlinburg, Tenn., June 2-6, 1997**

Awes, T. C. (For the WA98 Collaboration) (Invited Presentation)  
"Collective Flow as a Probe of Heavy-Ion Reaction Dynamics"

Gross, C. W., S. Satula, and C. Baktash  
"Identification of  $T_z = +1/2$  Excited States,  $^{75}\text{Rb}$ : Search for Possible Evidence for Neutron-Proton Correlations"

Nazarewicz, W. (Invited Presentation)  
"Frontiers of Nuclear Structure"

Rudolph, D., C. Baktash, M. J. Brinkman, M. Devlin, H.-Q. Jin, D. R. LaFosse, M. Leddy, I. Y. Lee, A. O. Macchiavelli, L. L. Riedinger, D. G. Sarantites, and C.-H. Yu  
"High-Spin  $\gamma$ -Ray Spectroscopy in the Vicinity of  $^{75}\text{Ni}$ "

Smith, M. S.  
"Nuclear Astrophysics at the Holifield Radioactive Ion Beam Facility"

Wong, C. Y.

"J/ $\psi$  and  $\psi'$  Suppression in High-Energy Pb-Pb Collisions"

**International Workshop – Beyond the Desert – Accelerator and Nonaccelerator Approaches, Tegernsee, Germany, June 8-14, 1997**

Kamyshkov, Y. A.

"Search for (B-L) Nonconservation in Neutron-Antineutron Transitions"

**1997 AIAA Plasmadynamics and Lasers Conference, Atlanta, Ga., June 23-25, 1997**

Alton, G. D., and Y. Liu (Invited Presentation)

"Future Prospects for ECR Plasma Generators with Improved Charge State Distributions"

**XX International Conference on the Physics of Electronic and Atomic Collisions, Vienna, Austria, July 23-29, 1997**

Bannister, M. E., Y.-S. Chung, N. Djuric, B. Wallbank, O. Woitke, S. Zhou, G. H. Dunn, and A.C.H. Smith (Invited Presentation)

"Resonance Interference and Absolute Cross Sections in Near-Threshold Electron-Impact Excitation of Multicharged Ions"

Blek, F. W., M. E. Bannister, R. Hoekstra, and C. C. Havener

"Low Energy Electron Capture by C<sup>4+</sup> Ions from Atomic Hydrogen Using Merged Beams"

Datz, S. (Invited Presentation)

"ICPEAC XX: A Retro- and Pro-spective Analysis"

Datz, S., S. Rosen, C. Stromholm, J. Semaniak, A. Larsson, A. Le Padellec, N. Djuric, R. Peverall, H. Danared, and M. Larsson

"Dissociative Recombination of CH<sub>5</sub><sup>+</sup> : Total Cross Sections and Branching Ratios"

Hagg, L., C. O. Reinhold, and J. Burgdorfer

"Neutralization of Highly Charged Ions in Front of Ionic Crystals"

Hagg, L., C. O. Reinhold, and J. Burgdorfer (Invited Presentation)

"Interaction of Multicharged Ions with Insulator Surfaces"

Jones, N. L., C. R. Vane, H. F. Krause, and S. Datz

"Sub-surface Neutralization of Highly Charged, Slow Recoil Ions"

Krause, H. F., C. R. Vane, S. Datz, P. Grafstrom, H. Knudsen, C. Scheidenberger, and R. H. Schuch

"Ionization of Hydrogenic 33-TeV Pb Ions"

Macek, J. H., and S. Yu. Ovchinnikov

"Rapid Oscillation in Electron Distributions at Low-Energy Ion-Atom Collisions"

Minniti, R., S. B. Elston, C. O. Reinhold, and J. Burgdorfer

"Coincidence Measurements of Electron Emission in Grazing Ion-Surface Collisions"

Pieksma, M., M. E. Bannister, W. Wu, and C. C. Havener

"Low-Energy Electron Capture by N<sup>2+</sup> Ions from H(D) in a Merged-Beams Setup"

Reinhold, C. O., J. Burgdorfer, M. T. Frey, and F. B. Dunning (Invited Presentation)

"Studying Atomic Dynamics with Designer Pulses"

Rosner, B., S. Datz, W. Wu, N. L. Jones, D. R. Schultz, and C. O. Reinhold  
"Charge-State Dependence of Energy Loss in Random Solids"

Schultz, D. R., C. O. Reinhold, and P. Krstic  
"Unexpected Classical Oscillation in Intermediate Energy Ion-Atom Collisions"

Stancil, P. C., B. Zygelman, and K. Kirby (Invited Presentation)  
"Calculations on Electron Capture in Low Energy Ion-Molecule Collisions"

Vane, C. R., H. F. Krause, S. Datz, P. Grafstrom, H. Knudsen, C. Scheidenberger, and R. H. Schuch  
"Electron Capture from Pair Production by 33-TeV Pb Ions"

Wu, W., and C. C. Havener (Invited Presentation)  
"State and Angular Resolved Electron Capture in a Merged-Beams Apparatus"

**International Symposium on Trends in Subatomic Physics, Taipei, Taiwan, Aug. 7-23, 1997**

Wong, C. Y. (Invited Presentation)  
"Heavy Quarkonium Production and Propagation in Nuclei"

**International Conference on Neutron Scattering (ICNS 97), Toronto, Canada, Aug. 17-21, 1997**

Tennant, D. A., S. E. Nagler, T. Barnes, A. W. Garrett, J. Riera, and B. C. Sales (Invited Presentation)  
"Excitations and Possible Bound States in the  $S = 1/2$  Alternating Chain Compound  $(VO)_2P_2O_7$ "

**7th Asia Pacific Physics Conference (7APPC), Beijing, China, Aug. 19-23, 1997**

Wong, C. Y. (Invited Presentation)  
"J/ $\psi$  Suppression as a Signal for the Quark-Gluon Plasma"

**Europhysics Conference on High Energy Physics, Jerusalem, Israel, Aug. 19-26, 1997**

Plasil, F. (Invited Presentation)  
"High Energy Nuclear Collisions "

**Symposium — From Polonium and Radium to Exotic and Superheavy Nuclides — Warsaw, Poland, Sept. 6, 1997**

Nazarewicz, W. (Invited Presentation)  
"Nuclear Structure at the Limits"

**5th International Workshop on Topics in Astroparticle and Underground Physics (TAUP 97), Assergi, Italy, Sept. 7-11, 1997**

Bugg, W., H. Cohn, Yu. Efremenko, A. Fazely, T. Gabriel, Yu. Kamyshev, F. Plasil, and R. Svoboda  
"ORLaND — Oak Ridge Large Neutrino Detector"

**7th International Conference on Ion Sources, Taormina, Italy, Sept. 7-13, 1997**

Alton, G. D., F. W. Meyer, Y. Liu, J. R. Beene, and D. Tucker  
"The Use of Broadband Microwave Radiation to Enhance the Performances of Traditional B-Minimum ECR Ion Sources"

Alton, G. D., R. F. Welton, B. Cui, and S. N. Murray  
"The Electron-Beam-Plasma Ion Source as Source of Negative Fluorine"

Alton, G. D., R. F. Welton, B. Cui, C. Williams, J. W. Middleton, and S. N. Murray  
"A New Concept, Direct-Extraction Positive/Negative Surface Impact Ionization Source for RIB Generation"

Alton, G. D., R. F. Welton, G. D. Mills, and S. N. Murray  
"A New Concept Kinetic-Ejection Surface Ionization Source for RIB Applications"

Alton, G. D., R. F. Welton, C. Williams, B. Cui, G. D. Mills, and S. N. Murray  
"New Concept Ion Sources for Radioactive Ion Beam Generation "

Alton, G. D., R. F. Welton, C. Williams, and S. N. Murray  
"Initial Evaluation of a Combined Thermal Molecular Dissociation/Electron Impact Ionization Source for RIB Generation"

Liu, Y., G. D. Alton, and G. D. Mills  
"A Compact, Single-Frequency, Permanent Magnet ECR Ion Source with a Large, Uniformly-Distributed Resonant Plasma Volume: Design Features"

Lohwasser, R., G. D. Alton, and R. F. Welton  
"High-Q RF Antenna Systems for Efficient Plasma Generation"

Sinclair, J. W.  
"Software Architecture Considerations for Ion Source Control Systems"

Welton, R. F., and G. D. Alton  
"The Formation, Transport, and Ionization of Molecules in RIB Target/Ion Source Systems"

Welton, R. F., G. D. Alton, B. Cui, and S. N. Murray  
"Experimental Methods for RIB Target/Ion Source Development and Characterization"

**Symposium on New Spectroscopy and Nuclear Structure, Copenhagen, Denmark,  
Sept. 16-20, 1997**

Garrett, J. D.  
"Nuclear Level Repulsion, Order vs. Chaos, and Conserved Quantum Numbers"

**International Conference on Atomic and Molecular Data and Their Applications  
(ICAMDATA), Gaithersburg, Md., Sept. 29-Oct. 2, 1997**

Schultz, D. R. (Invited Presentation)  
"Atomic Collision Databases and Data Services — A Survey"

Schultz, D. R., Panel Chair  
"Panel on Increasing the Visibility and Publicity for Data Activities and Assuring the Open Exchange of Data"

Schultz, D. R., P. S. Krstic, F. M. Ownby, F. W. Meyer, C. C. Havener, M. E. Bannister, W. Liu, D. J. Jeffery, and P. C. Stancil  
"The ORNL Controlled Fusion Atomic Data Center"

Schultz, D. R., P. S. Krstic, F. M. Ownby, P. C. Stancil, and F. W. Meyer (Invited Presentation)  
"The Controlled Fusion Atomic Data Center"

**3rd Research Coordination Meeting on Measurement, Calculation, and Evaluation of Photon Production Data, Bled, Slovenia, Sept. 29-Oct. 3, 1997**

Dickens, J. K. (Invited Presentation)

"Precision Measurements of  $^{56}\text{Fe}$  Cross Sections for the 847-keV Gamma Transition"

Dickens, J. K. (Invited Presentation)

"Review of Differential Measurements and Compilations of Experimental Photon Data Important for Applications for Neutron Energies Between Threshold and 13 MeV "

**American Physical Society, Division of Nuclear Physics, Whistler, Canada, Oct. 5-8, 1997**

Beene, J. R. (Invited Presentation)

"The Holifield Radioactive Ion Beam Facility at ORNL," *Bull. Am. Phys. Soc.* **42**, 1621 (Oct. 1997)

Bingham, C. R., X. J. Xu, J. Wauters, K. S. Toth, J. C. Batchelder, L. F. Conticchio, W. B. Walters, C. N. Davids, and D. Seweryniak

"Identification of  $^{180}\text{Tl}$   $\alpha$  Decay," *Bull. Am. Phys. Soc.* **42**, 1669 (Oct. 1997)

Blackmon, J. C., D. W. Bardayan, P. E. Koehler, J. W. McConnell, W. T. Milner, S. Raman, M. S. Smith, A. E. Champagne, A. A. Chen, P. D. Parker, K. B. Swartz, A. N. James, B. A. Johnson, R. L. Kozub, M. E. Roettger, M. Allen, and M. A. Hofstee

"Initial Experimental Results with the Daresbury Recoil Separator at ORNL," *Bull. Am. Phys. Soc.* **42**, 1661 (Oct. 1997)

Cianciolo, V.

"Design / Construction of the PHENIX Muon Identifier," *Bull. Am. Phys. Soc.* **42**, 1634 (Oct. 1997)

Garrett, J. D.

"Nuclear Level Repulsion and Order vs. Chaos," *Bull. Am. Phys. Soc.* **42**, 1677 (Oct. 1997)

Gross, C. J.

"Recent Results and Status of the HRIBF Recoil Mass Spectrometer," *Bull. Am. Phys. Soc.* **42**, 1661 (Oct. 1997)

Koehler, P. E., R. R. Spencer, K. H. Guber, S. Raman, J. A. Harvey, N. W. Hill, J. C. Blackmon, D. W. Bardayan, D. C. Larson, T. A. Lewis, D. E. Pierce, M. S. Smith, and R. R. Winters

"High Resolution Neutron Capture and Transmission Measurements on  $^{137}\text{Ba}$  and Their Impact on the Interpretation of Meteoric Barium Anomalies," *Bull. Am. Phys. Soc.* **42**, 1680 (Oct. 1997)

Read, K. F.

"The Physics of the PHENIX Muon Arms," *Bull. Am. Phys. Soc.* **42**, 1633 (Oct. 1997)

Rudolph, D., C. Baktash, M. J. Brinkman, C.-H. Yu, J. Dobaczewski, W. Satula, W. Nazarewicz, M. Devlin, D. R. LaFosse, D. G. Sarantites, H. Q. Jin, and L. L. Riedinger

"Proton Decay of the Deformed Second Minimum in the  $N = Z$  Nucleus  $^{58}\text{Cu}$ ," *Bull. Am. Phys. Soc.* **42**, 1643 (Oct. 1997)

Toth, K. S., K. Rykaczewski, J. C. Batchelder, C. R. Bingham, X.-J. Xu, T. Davinson, P. J. Woods, W. B. Walters, and E. F. Zganjar

"Identification of  $^{145}\text{Tm}$  by Its Proton Radioactivity," *Bull. Am. Phys. Soc.* **42**, 1640 (Oct. 1997)

**International Conference on Future Nuclear Systems (GLOBAL '97), Yokahama, Japan,  
Oct. 5-10, 1997**

Raman, S., R. L. Walker, J. K. Dickens, B. D. Murphy  
"The US/UK Actinides Experiment at the Dounreay PFR"

**Joint Fall Meeting of the Texas Section of the APS, AAPT, and Zone 13 of the SPS,  
Denton, Texas, Oct. 9-11, 1997**

Ward, S. J., J. H. Macek, and S. Y. Ovchinnikov (Invited Presentation)  
"Positronium Formation in Low-Energy Positron-Hydrogen Collisions," *Bull. Am. Phys. Soc.* **42**, 2303  
(Dec. 1997)

**1997 Symposium of Northeastern Accelerator Personnel (SNEAP-97), Julich,  
Germany, Oct. 12-15, 1997**

Jones, N. L.  
"EN Tandem at ORNL"

Meigs, M. J., D. L. Haynes, and R. C. Juras  
"Oak Ridge 25URC Tandem Accelerator"

**International Symposium on the Shell Model (SHELL 97), Stockholm, Sweden,  
Oct. 29-Nov. 1, 1997**

Kahane, S., S. Raman, and K. H. Bhatt  
"Quadrupole Collectivity of Angular-Momentum Projected States of Nucleons in the High-J Intruder  
Single-Particle States"

**Origins of Matter and Evolution of Galaxies, Atami, Japan, Nov. 5-7, 1997**

Smith, M. S. (Invited Presentation)  
"Nuclear Astrophysics at the Holifield Radioactive Ion Beam Facility"

**American Physical Society, Southeastern Section, Nashville, Tenn., Nov. 6-8, 1997**

Beyer, C. J., and D. C. Radford  
"Four-Fold Coincidence Analysis in RadWare," *Bull. Am. Phys. Soc.* **42**, 1798 (Nov. 1997)

**IEEE Nuclear Science Symposium and Medical Imaging Conference, Albuquerque,  
N.M., Nov. 9-13, 1997**

Britton, C. L., M. N. Ericson, S. F. Frank, M. L. Simpson, G. R. Young, R. S. Smith, L. G. Clonts,  
T. Parakkat, J. Boissevain, S. Hahn, J. S. Kapustinsky, J. Simon-Gillo, J. P. Sullivan, and H. Van Heck  
"TGV32: A 32-Channel Preamplifier Chip for the Multiplicity Vertex Detector at PHENIX"

Bryan, W. L., U. Jagadish, C. L. Britton, S. S. Frank, M. N. Ericson, M. L. Simpson, G. R. Young, L. G.  
Clonts, R. S. Smith, A. Oskarsson, T. Mark, E. Obrien, and V. Greene  
"TGLD: A 16-Channel Charge Readout Chip for the PHENIX Pad Chamber Detector Subsystem at  
RHIC"

Emery, M. S., M. N. Ericson, C. L. Britton, M. C. Smith, S. S. Frank, G. R. Young, M. D. Allen, and L. G.  
Clonts (Invited Presentation)  
"Timing and Control Requirements for a 32-Channel AMU-ADC ASIC for the PHENIX Detector"

Ericson, M. N., C. L. Britton, M. S. Emery, M. S. Musrock, D. E. Smith, G. R. Young, J. Boissevain, J. S. Kapustinsky, J. Simon-Gillo, J. P. Sullivan, H. Van Hecke, S. F. Hahn, M. D. Allen, and R. E. Lind (Invited Presentation)

"Front-End Module Readout and Control Electronics for the PHENIX Multiplicity Detector"

Wintenberg, A. L., C. G. Moscone, J. P. Jones, and G. R. Young

"A CMOS Integrating Amplifier for the PHENIX Ring Imaging Cherenkov Detector"

**XVII International Symposium on Innovative Computational Methods in Many-Body Problems (INNOCOM 97), Osaka, Japan, Nov. 10-15, 1997**

Dean, D. J. (Invited Presentation)

"Computational Nuclear Structure: Challenges, Rewards, and Prospects"

Dobaczewski, J. (Invited Presentation)

"Self-Consistent Methods in Nuclear Structure Physics"

**International Conference on Fission and Properties of Neutron-Rich Nuclei, Sanibel Island, Florida, Nov. 12-15, 1997**

Dean, D. J. (Invited Presentations)

"Shell-Model Monte Carlo Studies of Nuclei Far from Stability"

Nazarewicz, W. (Invited Presentation)

"Structure of Neutron-Rich Nuclei"

Oberacker, V. E., A. S. Umar, J. C. Wells, M. R. Strayer, J. A. Maruhn, and P.-G. Reinhard (Invited Presentation)

"Prompt Muon-Induced Fission: A Probe for Nuclear Friction in Large-Amplitude Collective Motion"

Rybczowski, K., R. Grzywacz, M. Lewitowicz, M. Pfutzner, and H. Grawe (Invited Presentation)

"Experiments with Neutron-Rich Isomeric Beams"

**13th International Conference on Ultrarelativistic Nucleus-Nucleus Collisions (Quark Matter '97), Tsukuba, Japan, Dec. 1-5, 1997**

Morrison, D. P. (PHENIX Collaboration), including T. C. Awes, V. Cianciolo, F. Plasil, K. Read, S. P. Sorensen, P. W. Stankus, and G. R. Young

"The PHENIX Experiment at RHIC"

Nayak, T. K. (For the WA98 Collaboration)

M. Aggarwal, A. Agnihotri, Z. Ahmed, A.L.S. Angelis, V. Antonenko, V. Arefiev, V. Astakhov, V. Avdeitchikov, T. C. Awes, P.V.K.S. Baba, S. K. Badyal, A. Baldine, L. Barabach, C. Barlag, S. Bathe, B. Batiounia, T. Bernier, K. B. Bhalla, V. S. Bhatia, C. Blume, D. Bock, R. Bock, E.-M. Bohne, D. Bucher, A. Buijs, E.-J. Buis, H. Busching, L. Carlen, V. Chalyshayev, S. Chattopadhyay, K. E. Chenawi, R. Cherbatchev, T. Chujo, A. Claussen, A. C. Das, M. P. Decowski, V. Djordjadze, P. Donni, I. Doubrovik, M. R. Dutta Majumdar, S. Eliseev, K. Enosawa, H. Feldman, P. Foka, S. Fokin, V. Frolov, M. S. Ganti, S. Garpman, O. Gavishchuk, F.J.M. Geurts, T. K. Ghosh, R. Glasow, S. K. Gupta, B. Gusakov, H.-A. Gustafsson, H. H. Gutbrod, R. Higuchi, I. Hrivnacova, M. Ippolitov, H. Kalechofsky,, R. Kamermans, K. H. Kampert, K. Karadjev, K. Karpio, S. Kato, S. Kees, H. Kim, B. W. Kolb, I. Kosarev, I. Koutcheryaev, A. Kugler, P. Kulinich, V. Kumar, M. Kurata, K. Kurita, N. Kuzmin, I. Langbein, A. Lebedev, Y. Y. Lee, H. Loehner, D. P. Mahapatra, V. Manko, M. Martin, A. Maximov, R. Mehdiyev, G. Mgebrichvili, Y. Miake, D. Mikhalev, G. C. Mishra, Y. Miyamoto, D. Morrison, D. S. Mukhopadhyay, V. Myalkovski, H. Naef, B. K. Nandi, S. K. Nayak, T. K. Nayak, S. Neumaier, A. Nianine, V. Nikitine, S. Nikolaev, S. Nishimura, P. Nomokov, J. Nystrand, F. E. Obenshain, A. Oskarsson, I. Otterlund, M. Pachr, A. Parfenov, S. Pavliouk,

T. Peitzmann, V. Petracek, F. Plasil, M. L. Purschke, B. Raeven, J. Rak, S. Raniwala, V. S. Ramamurthy, N. K. Rao, F. Retiere, K. Reygers, G. Roland, L. Rosselet, I. Roufanov, J. Rubio, S. S. Sambyal, R. Santo, S. Sato, H. Schlagheck, H. R. Schmidt, G. Shabratova, I. Sibariak, T. Siemianczuk, B. C. Sinha, N. Slavine, K. Soderstrom, N. Solomey, S. P. Sorensen, P. Stankus, G. Stefanek, P. Steinberg, E. Stenlund, D. Stueken, M. Sumbera, T. Svensson, M. D. Trivedi, A. Tsvetkov, C. Twenhoefel, L. Tykarski, J. Urbahn, N. Van Eijndhoven, W. H. Van Heeringen, G. J. Van Nieuwenhuizen, A. Vinogradov, Y. P. Viyogi, A. Vodopianov, M. A. Vos, B. Wyslouch, K. Yagi, Y. Yokota, and G. R. Young

"Present Status and Future of DCC Analysis"

Read, K. F.

"The Physics of the PHENIX Muon Arms"

Saito, N. (PHENIX Collaboration), including T. C. Awes, V. Cianciolo, F. Plasil, K. Read, S. P. Sorensen, P. W. Stankus, and G. R. Young

"Spin Physics with the PHENIX Detector System"

Stankus, P.

"Measuring Jet Production in RHIC A + A Collisions Through Leading Particles in PHENIX"

Wyslouch, B. (For the WA98 Collaboration)

M. Aggarwal, A. Agnihotri, Z. Ahammed, A.L.S. Angelis, V. Antonenko, V. Arefiev, V. Astakhov, V. Avdeitchikov, T. C. Awes, P.V.K.S. Baba, S. K. Badyal, A. Baldine, L. Barabach, C. Barlag, S. Bathe, B. Batiounia, T. Bernier, K. B. Bhalla, V. S. Bhatia, C. Blume, R. Bock, E.-M. Bohne, D. Bucher, A. Buijs, E.-J. Buis, H. Busching, L. Carlen, V. Chalyshev, S. Chattopadhyay, R. Cherbatchev, T. Chujo, A. Claussen, A. C. Das, M. P. Decowski, V. Djordjadze, P. Donni, I. Doubrovik, M. R. Dutta Majumdar, K. El Chenawi, S. Eliseev, K. Enosawa, H. Feldman, P. Foka, S. Fokin, V. Frolov, M. S. Ganti, S. Garpmann, O. Gavrilchuk, F.J.M. Geurts, T. K. Ghosh, R. Glasow, S. K. Gupta, B. Guskov, H.-A. Gustafsson, H. H. Gutbrod, R. Higuchi, I. Hrivnacova, M. Ippolitov, H. Kalechofsky, R. Kamermans, K. H. Kampert, K. Karadjev, K. Karpio, S. Kato, S. Kees, H. Kim, B. W. Kolb, I. Kosarev, I. Koutcheryaev, A. Kugler, P. Kulinich, V. Kumar, M. Kurata, K. Kurita, N. Kuzmin, I. Langbein, A. Lebedev, Y. Y. Lee, H. Loehner, D. P. Mahapatra, V. Manko, M. Martin, A. Maximov, R. Mehdiyev, G. Mgebrichvili, Y. Miake, D. Mikhalev, G. C. Mishra, Y. Miyamoto, D. Morrison, D. S. Mukhopadhyay, V. Myalkovski, H. Naef, B. K. Nandi, S. K. Nayak, T. K. Nayak, S. Neumaier, A. Nianine, V. Nikitine, S. Nikolaev, P. Nilsson, S. Nishimura, P. Nomokov, J. Nystrand, F. E. Obenshain, A. Oskarsson, I. Otterlund, M. Pachr, A. Parfenov, S. Pavliouk, T. Peitzmann, V. Petracek, F. Plasil, M. L. Purschke, B. Raeven, J. Rak, S. Raniwala, V. S. Ramamurthy, N. K. Rao, F. Retiere, K. Reygers, G. Roland, L. Rosselet, I. Roufanov, J. Rubio, S. S. Sambyal, R. Santo, S. Sato, H. Schlagheck, H. R. Schmidt, G. Shabratova, I. Sibariak, T. Siemianczuk, D. Silvermyr, B. C. Sinha, N. Slavine, K. Soderstrom, N. Solomey, S. P. Sorensen, P. Stankus, G. Stefanek, P. Steinberg, E. Stenlund, D. Stueken, M. Sumbera, T. Svensson, M. D. Trivedi, A. Tsvetkov, C. Twenhoefel, L. Tykarski, J. Urbahn, N. Van Eijndhoven, W. H. Van Heeringen, G. J. Van Nieuwenhuizen, A. Vinogradov, Y. P. Viyogi, A. Vodopianov, M. A. Vos, B. Wyslouch, K. Yagi, Y. Yokota, and G. R. Young

"Recent Results on Pb+Pb Collisions at 158 GeV from the WA98 Experiment at CERN"

**Second Oak Ridge Symposium on Atomic and Nuclear Astrophysics, Oak Ridge, Tenn., Dec. 2-6, 1997**

Dalgarno, A., P. C. Stancil, and S. Lepp

"Molecular Processes in the Early Universe"

De Nisco, K. R., S. W. Bruenn, and A. Mezzacappa

"The Effects of General Relativity on Core Collapse Supernovae"

Hix, W. R., F.-K. Thielemann, A. M. Khokhlov, and J. C. Wheeler

"Simplifying Silicon Burning: Application of Quasi-Equilibrium to  $\alpha$  Network Nucleosynthesis"

Jeffrey, D. J.  
"A Grey  $\gamma$ -Ray Transfer Procedure for Supernovae"

Koehler, P. E. (Invited Presentation)  
"High Resolution Neutron Capture and Transmission Measurements on  $^{137}\text{Ba}$  and Their Impact on the Interpretation of Meteoric Barium Anomalies"

Krstic, P. S., P. C. Stancil, and D. R. Schultz  
"Theoretical Treatment of Charge Transfer Processes of Relevance to Astrophysics"

Liu, W.  
"Atomic and Molecular Supernovae"

Messer, O.E.B., A. Mezzacappa, S. W. Bruenn, and M. W. Guidry (Invited Presentation)  
"Neutrino-Driven Supernovae: Boltzmann Neutrino Transport and the Explosion Mechanism"

Smith, M. S. (Invited Presentation)  
"Nuclear Astrophysics at the Holifield Radioactive Ion Beam Facility"

Smith, M. S., J. C. Blackmon, P. E. Koehler, T. A. Lewis, J. W. McConnell, W. T. Milner, D. E. Pierce, D. Shapira, D. W. Bardayan, A. A. Chen, P. D. Parker, K. B. Swartz, D. W. Visser, R. L. Kozub, B. A. Johnson, M. E. Roettger, A. E. Champagne, Z. Ma, U. Greife, F. Strieder, A. N. James, M. A. Hofstee, and M. Allen (Invited Presentation)  
"Commissioning of the Daresbury Recoil Separator for Nuclear Astrophysics Measurements at the Holifield Radioactive Ion Beam Facility"

Stancil, P. C.  
"Molecule Formation and Destruction Processes in Astrophysical Environments"

**First International Symposium on the Current Status of the Physical, Chemical, and Biological Properties of Stable Water Clusters, Los Angeles, Calif., Dec. 6, 1997**

Wong, C. Y., and S. Y. Lo (Invited Presentation)  
"Possible Mechanism of Formation and Stability of Anomalous States of Water"

**1998**

**XXI Symposium on Nuclear Physics, Oaxtepec, Mexico, Jan. 5-8, 1998**

Shapira, D. (Invited Presentation)  
"The Holifield Radioactive Ion Beam Facility — Getting Ready to do Experiments with Radioactive Ion Beams"

**International Workshop on the Physics of Radioactive Nuclear Beams, Puri, India, Jan. 12-17, 1998**

Alton, G. D., and J. R. Beene (Invited Presentation)  
"The Holifield Radioactive Ion Beam Facility at the Oak Ridge National Laboratory: Present Status and Future Plans"

**14th Winter Workshop on Nuclear Dynamics, Snowbird, Utah, Feb. 1-7, 1998**

Plasil, F. (For the WA80 and WA98 Collaborations) (Invited Presentation)  
"Neutral Pion Production in Nucleus-Nucleus Collisions at 158 and 200 GeV/Nucleon"

**11th American Physical Society Topical Conference on Atomic Processes in Plasmas,  
Auburn, Ala., Mar. 22-26, 1998**

Bannister, M. E., N. Djuric, O. Woitke, G. H. Dunn, Y.-S. Chung, A.C.H. Smith, and B. Wallbank (Invited Presentation)

"Recent Experiments on Near-Threshold Electron-Impact Excitation of Multiply Charged Ions"

Havener, C. C.

"Low Energy Electron Capture with Multicharged Ions Using Merged Beams"

Krstic, P. S., P. C. Stancil, W. Liu, D. J. Jeffery, and D. R. Schultz

"Theoretical Atomic Physics and Data Activities for Fusion and Astrophysics"

Meyer, F. W.

"A New Apparatus for Fusion-Relevant Ion-Surface Interaction Studies Using Decelerated Beams"

Stancil, P. C., P. S. Krstic, and D. R. Schultz (Invited Presentation)

"Heavy Particle Atomic Collisions for Astrophysics: Beyond H and He Targets"

**First Asian Particle Accelerator Conference, Tsukuba, Japan, Mar. 23-27, 1998**

Alton, G. D., and J. R. Beene (Invited Presentation)

"The Holifield Radioactive Ion Beam Facility at the Oak Ridge National Laboratory: Present Status and Future Plans"

**American Chemical Society Symposium, Nuclear Structure with Large Gamma-Ray  
Detector Arrays and Their Auxiliary Devices, Dallas, Texas, Mar. 30-Apr. 1, 1998**

Baktash, C. (Invited Presentation)

"Nuclear Structure Studies with Radioactive Ion Beams"

**NASA Laboratory Space Science Workshop, Cambridge, Mass., Apr. 1-3, 1998**

Jeffery, D. J., P. S. Krstic, W. Liu, D. R. Schultz, and P. C. Stancil

"Atomic and Molecular Physics and Data Activities for Astrophysics at Oak Ridge National Laboratory"

**Chemistry and Physics of Molecules and Grains in Space, Nottingham, U.K.,  
Apr. 15-17, 1998**

Stancil, P. C., and A. Dalgarno (Invited Presentation)

"Chemical Processes in Astrophysical Radiation Fields"

**Joint Meeting of the American Physical Society and the American Association of  
Physics Teachers, Columbus, Ohio, Apr. 18-21, 1998**

Baktash, C. (Invited Presentation)

"Novel Shapes and Exotic Decay Modes in Medium Mass Nuclei," *Bull. Am. Phys. Soc.* **43**, 1221  
(pr. 1998)

Bardayan, D. W., J. C. Blackmon, P. E. Koehler, T. A. Lewis, Z. Ma, J. W. McConnell, W. T. Milner, D. E. Pierce, D. Shapira, M. S. Smith, A. E. Champagne, A. A. Chen, P. D. Parker, K. B. Swartz, U. Greife, F. Strieder, A. N. James, R. L. Kozub, and M. A. Hofstee

"Initial Reaction Study Results with the Daresbury Recoil Separator at ORNL," *Bull. Am. Phys. Soc.* **43**, 1157 (Apr. 1998)

Batchelder, J. C., K. S. Toth, C. R. Bingham, J. Wauters, E. F. Zganjar, C. N. Davids, D. Seweryniak, R. J. Irvine, and W. B. Walters

"Study of  $^{187}\text{Bi}$   $\alpha$  Decay," *Bull. Am. Phys. Soc.* **43**, 1162 (Apr. 1998)

Beene, J. R. (Invited Presentation)

"The HRIBF: Radioactive Beams with Tandem Post-Acceleration," *Bull. Am. Phys. Soc.* **43**, 1204-05 (Apr. 1998)

Bingham, C. R., W. Reviol, X.-J. Xu, J. C. Batchelder, K. S. Toth, D. Seweryniak, J. Uusitalo, J. L. Wood, and J. A. Cizewski

"Location of the  $1/2^+$  Intruder State in  $^{195}\text{At}$  by Means of  $\alpha$  Decay," *Bull. Am. Phys. Soc.* **43**, 1171 (Apr. 1998)

Paul, S. D., Y. A. Akovali, C. Baktash, C. J. Gross, A. Galindo-Uribarri, D. C. Radford, K. Toth, C.-H. Yu, T. Ginter, W. Satula, W. Reviol, L. Riedinger, W. Weintraub, M. Devlin, D. R. LaFosse, F. Lerma, D. G. Sarantites, I. Birriel, J. X. Saladin, D. F. Winchell, V. Q. Wood, G. N. Sylvan, S. L. Tabor, R. M. Clark, I.-Y. Lee, and A. O. Macchiavelli

"Observation of a Rigid-Rotational Band in the  $N = Z+1$  Nucleus  $^{79}\text{Y}$ ," *Bull. Am. Phys. Soc.* **43**, 1134 (Apr. 1998)

Toth, K. S., C. R. Bingham, X.-J. Xu, J. Wauters, J. C. Batchelder, L. F. Conticchio, W. B. Walters, C. N. Davids, and D. Seweryniak

"Alpha-Decay Properties of  $^{180}\text{TI}$  and  $^{179}\text{TI}$ ," *Bull. Am. Phys. Soc.* **43**, 1172 (Apr. 1998)

Yu, C.-H., C. Baktash, S. D. Paul, D. C. Radford, J. A. Cameron, D. S. Haslip, T. Lampman, C. E. Svensson, J. C. Waddington, J. N. Wilson, D. R. LaFosse, F. Lerma, D. G. Sarantites, D. Rudolph, J. Eberth, I. Y. Lee, and A. O. Macchiavelli

"Highly Deformed Rotational Bands in  $^{65}\text{Zn}$ ," *Bull. Am. Phys. Soc.* **43**, 1134 (Apr. 1998)

#### **Fourth International Symposium on Swift Heavy Ions in Matter (SHIM 98), Berlin, Germany, May 11-15, 1998**

Reinhold, C., P. Kuerpick, J. Burgdorfer, S. Yoshida, and B. Gervais

"Electronic Excitation in Transmission of Relativistic H- Ions Through Thin Foils"

#### **1998 INT/RHIC Workshop on Charmonium Production in Relativistic Nuclear Collisions, Seattle, Wash., May 18-22, 1998**

Wong, C. Y. (Invited Presentation)

"Drell-Yan Cross Section and  $J/\psi$  Production in High-Energy Nucleus-Nucleus Collisions"

#### **6th International Spring Seminar on Nuclear Physics: *Highlights of Modern Nuclear Structure*, S. Agata, Italy, May 18-22, 1998**

Baktash, C. (Invited Presentation)

"Novel Shapes and Exotic Decay Modes in Medium-Mass Nuclei"

Hamilton, J. H., S. J. Zhu, A. V. Ramayya, J. K. Hwang, L. K. Peker, E. F. Jones, X. Q. Chang, and P. M. Gore (Invited Presentation)

"Stable and Vibrational Octupole Modes in Mo, Xe, Ba, La, Ce, and Nd"

**1998 Annual Meeting Division of Atomic, Molecular, and Optical Physics, American Physical Society, Santa Fe, N.M., May 27-30, 1998**

Bannister, M. E., A.C.H. Smith, N. Djuric, B. Wallbank, O. Woitke, and G. H. Dunn  
"Absolute Cross Sections for Electron-Impact Ionization of Li-Like Ions," *Bull. Am. Phys. Soc.* **43**, 1338 (May 1998)

Datz, S. (Invited Presentation)

"Studies of Dissociative Recombination in Heavy-Ion Storage Rings: Relation of Geo- and Astrophysics," *Bull. Am. Phys. Soc.* **43**, 1247 (May 1998)

Havener, C. C., and W. Wu

"State-Selective Electron Capture Measurements Using Merged Beams," *Bull. Am. Phys. Soc.* **43**, 1345 (May 1998)

Khrebtukov, D. B., S. Yu. Ovchinnikov, J. H. Macek, and S. Yu. Khrebutkov

"Spectra of Electron Detachment in Collisions of Hydrogen Atoms with H-," *Bull. Am. Phys. Soc.* **43**, 1346 (May 1998)

Krause, H. F., C. R. Vane, S. Datz, P. Grafstrom, H. Knudsen, G. Scheidenberger, and R. H. Schuch  
"Electron Capture and Ionization of Pb Ions at 33 TeV," *Bull. Am. Phys. Soc.* **43**, 1264 (May 1998)

Krstic, P., C. Reinhold, and D. Schultz

"Interference Oscillations in the Inelastic Cross Sections for Slow Ion-Hydrogen Collisions," *Bull. Am. Phys. Soc.* **43**, 1260 (May 1998)

Krstic, P., and D. Schultz

"Is Hidden Crossings Theory a New MOCC Method?," *Bull. Am. Phys. Soc.* **43**, 1347 (May 1998)

Kuerpick, P., C. O. Reinhold, and J. Burgdorfer

"Subshell Population of Hydrogen Atoms After Transmission of Relativistic H- Ions Through Thin Foils," *Bull. Am. Phys. Soc.* **43**, 1257 (May 1998)

Reinhold, C. O. (Invited Presentation)

"Tailoring Atomic Wavefunctions with Designer Pulses," *Bull. Am. Phys. Soc.* **43**, 1324 (May 1998)

Reinhold, C. O., S. Yoshida, J. Burgdorfer, M. T. Frey, and F. B. Dunning

"Dynamic Stabilization of the Kicked Rydberg Atom," *Bull. Am. Phys. Soc.* **43**, 1262 (May 1998)

Schultz, D., and J. Wells

"Lattice Schrodinger Equation Approach for Excitation in Proton-Hydrogen Collisions," *Bull. Am. Phys. Soc.* **43**, 1260 (May 1998)

Stancil, P. C. (Invited Presentation)

"Atomic and Molecular Processes in Primordial Structure Formation," *Bull. Am. Phys. Soc.* **43**, 1325 (May 1998)

Stancil, P. C., K. P. Kirby, J.-P. Gu, G. Hirsch, and R. J. Buenker

"The Formation of SiH+, PH+, and HS+ by Radiative Association," *Bull. Am. Phys. Soc.* **43**, 1305 (May 1998)

- Tantawi, R. S., S. Yu. Ovchinnikov, and J. H. Macek  
"Excitation of Hydrogen Atoms by Electron Impact," *Bull. Am. Phys. Soc.* **43**, 1332 (May 1998)
- Vane, C. R., S. Datz, J. D. Hunn, N. L. Jones, and H. F. Krause  
"Sub-Surface Neutralization of Highly Charged, Slow Recoil Ions," *Bull. Am. Phys. Soc.* **43**, 1264 (May 1998)
- Ward, S. J., J. H. Macek, and S. Yu. Ovchinnikov  
"Hidden Crossing Theory Applied to Ps-Formation in Positron-Hydrogen Collisions," *Bull. Am. Phys. Soc.* **43**, 1307 (May 1998)
- Woitke, O., Y.-S. Chung, N. Djuric, B. Wallbank, S. Zhou, G. H. Dunn, M. E. Bannister, and A.C.H. Smith  
"Absolute Cross Sections for Electron Impact Excitation of B<sup>2+</sup> and C<sup>3+</sup>," *Bull. Am. Phys. Soc.* **43**, 1338 (May 1998)
- Yoshida, S., C. O. Reinhold, J. Burgdorfer, B. E. Tannian, R. A. Popple, and F. B. Dunning  
"Accurate Ionization Thresholds of Atoms Subject to Half-Cycle Pulses," *Bull. Am. Phys. Soc.* **43**, 1323 (May 1998)
- XXII International Conference on Condensed Matter Theories, Nashville, Tenn., June 1-6, 1998**
- Dean, D. J. (Invited Presentation)  
"Shell-Model Monte Carlo Calculations in Nuclei"
- European Conference on Energy Dispersive X-Ray Spectroscopy, Bologna, Italy, June 7-12, 1998**
- Papp, T., and S. Raman  
"How Accurately Do We Know the X-Ray Energies?"
- Workshop on Particle Distributions in Hadronic and Nuclear Collisions, Chicago, Ill., June 11-13, 1998**
- Wong, C. Y. (Invited Presentation)  
"Unresolved Questions in J<sub>ψ</sub> Production and Propagation in Nuclei"
- 8th International Conference on Particle-Induced X-Ray Emission and Its Analytical Applications, Lund, Sweden, June 14-18, 1998**
- Torok, I., T. Papp, and S. Raman  
"Energy Systematics of the Multiple K<sub>α</sub>L Satellites"
- Workshop on Physics and Instrumentation with 6-12 GeV Beams, Newport News, Va., June 15-18, 1998**
- Barnes, T. (Invited Presentation)  
"Production of Hybrid Mesons"
- International Conference on Nuclear Structure at the Extremes, Lewes, East Sussex, U.K., June 17-19, 1998**
- Kahane, S., S. Raman, and K. H. Bhatt  
"Quadrupole Activity of Angular-Momentum Projected States of Nucleons in the High-*j* Intruder Single-Particle States"

**2nd International Conference on Exotic Nuclei and Atomic Masses (ENAM 98),  
Bellaire, Mich., June 23-27, 1998**

Batchelder, J. C., C. R. Bingham, T. Davinson, T. N. Ginter, C. J. Gross, R. Grzywacz, J. W. McConnell,  
A. Piechaczek, K. Rykaczewski, K. S. Toth, W. B. Walters, P. J. Woods, and E. F. Zganjar  
"Proton Decay Studies at HRIBF"

Bingham, C. R., J. C. Batchelder, C. N. Davids, R. J. Irvine, W. Reviol, D. Seweryniak, K. S. Toth, W. B.  
Walters, J. Wauters, J. L. Wood, W. J. Xu, J. Uusitalo, and E. F. Zganjar  
"Alpha Decay of the  $h_{9/2}$  Ground and  $s_{1/2}$  Intruder States in Light Bi and At Isotopes"

Dean, D. J. (Invited Presentation)  
"Shell-Model Monte Carlo Studies of Nuclei Far from Stability"

Gross, C. J., J. C. Batchelder, J. W. Johnson, Y. A. Akovali, C. Baktash, A. Galindo-Uribarri, F. Liang, W. T.  
Milner, J. W. McConnell, S. D. Paul, D. C. Radford, K. Rykaczewski, D. Shapira, K. S. Toth, T. Davinson,  
P. J. Woods, T. N. Ginter, C. R. Bingham, W. Reviol, W. Weintraub, A. Piechaczek, E. Zganjar, and  
B. MacDonald

"Identification of Gamma Rays in the Ground-State Proton Emitter  $^{113}\text{Cs}$ "

Nazarewicz, W. (Invited Presentation)  
"Exotic Nuclei from a Theoretical Perspective"

Piechaczek, A., J. C. Batchelder, E. F. Zganjar, B. D. MacDonald, C. J. Gross, K. Rykaczewski, K. S. Toth,  
C. R. Bingham, R. Grzywacz, and T. Ginter  
"A Versatile Moving Tape Collector System: Measurement of the Multipolarity of the 228-keV Isomeric  
Transition in  $^{80}\text{Y}$ "

Rykaczewski, K., J. Kurpeta, A. Plochocki, M. Karny, J. Szerypo, A.-H. Evensen, E. Kugler, J. Lettry, H. L.  
Ravn, P. VanDuppen, A. Andreyev, M. Huyse, A. Wohr, A. Jokinen, J. Aysto, A. Nieminen, M. Huhta,  
M. Ramdhane, G. Walter, P. Hoff, and ISOLDE Collaboration  
"Production and Identification of New Neutron-Rich Nuclei in  $^{208}\text{Pb}$  Region"

Varner, R. L., N. Gan, J. R. Beene, M. Halbert, D. W. Stracener, A. Azhari, E. Ramakrishnan, P. Thirolf,  
M. R. Thoennessen, and S. Yokoyama (Invited Presentation)  
"Measurement of the E1 Strength Function of  $^{11}\text{Be}$ "

**Nuclei in the Cosmos V, Volos, Greece, July 6-11, 1998**

Freiburghaus, Ch., W. R. Hix, and F.-K. Thielemann  
"A Reduced Quasi-Equilibrium Network for Silicon Burning"

Koehler, P. E., R. R. Spencer, K. H. Guber, J. A. Harvey, J. C. Blackmon, S. Raman, D. C. Larson, D. W.  
Bardayan, and T. A. Lewis  
"New Neutron Capture and Total Cross Section Measurements on  $^{88}\text{Sr}$  and Their Impact on s-Process  
Nucleosynthesis"

Smith, M. S., D. W. Bardayan, J. C. Blackmon, and Z. Ma  
"Nuclear Astrophysics Data at ORNL"

**Workshop on the Experimental Equipment for an Advanced ISOL Facility, Lawrence  
Berkeley Laboratory, Berkeley, Calif., July 22-25, 1998**

Liang, J. F., J. R. Beene, A. Galindo-Uribarri, J. Gomez del Campo, C. J. Gross, M. L. Halbert, A.I.D.  
MacNab, D. Shapira, R. L. Varner, and K. Zhao

"Detector for Measuring Evaporation Residues in Gas Filled Split-Pole Magnetic Spectrograph"

Smith, M. S., A. N. James, J. C. Blackmon, D. W. Bardayan, R. L. Kozub, and Z. Ma  
"A Recoil Separator for Astrophysics at the Advanced ISOL Facility"

**Nuclear Structure '98, Gatlinburg, Tenn., Aug. 10-15, 1998**

Batchelder, J. C., C. R. Bingham, K. Rykaczewski, K.S. Toth, T. Davinson, T. N. Ginter, C. J. Gross, R. Grzywacz, M. Karny, S. H. Kim, J. F. Mas, J. W. McConnell, B. D. MacDonald, A. Piechaczek, J. J. Ressler, R. C. Slinger, J. Szerypo, W. Weintraub, P. J. Woods, C.-H. Yu, and E. F. Zganjar (Invited Presentation)

"Proton Decay Studies of the Light Lu, Tm, and Ho Isotopes"

Dean, D. J., and J. A. White (Invited Presentation)  
"Monte Carlo Methods and Applications for the Nuclear Shell Model"

Galindo-Uribarri, A., D. Radford, S. M. Mullins, D. Ward, I. Ragnarsson, L. Riedinger, W. Reviol, W. Satula, and B. H. Smith

"Superdeformation Below N = 73"

Ginter, T. N., C. J. Gross, J. H. Hamilton, A. V. Ramayya, D. Shapira, J. W. Johnson, J. W. McConnell, W. T. Milner, J. F. Mas, Y. A. Akovali, C. Baktash, J. C. Batchelder, C. R. Bingham, A. Galindo-Uribarri, B. D. MacDonald, S. D. Paul, A. Piechaczek, D. C. Radford, W. Reviol, K. Rykaczewski, K. S. Toth, C. H. Yu, and E. F. Zganjar

"The Oak Ridge HRIBF Recoil Mass Spectrometer"

Gross, C. J., Y. A. Akovali, C. Baktash, J. C. Batchelder, C. R. Bingham, M. P. Carpenter, C. N. Davids, T. Davinson, D. Ellis, A. Galindo-Uribarri, T. N. Ginter, R. Grzywacz, R.V.F. Janssens, J. W. Johnson, F. Liang, C. J. Lister, J. Mas, B. MacDonald, S. D. Paul, A. Piechaczek, D. C. Radford, W. Reviol, K. Rykaczewski, W. Satula, D. Seweryniak, D. Shapira, K. S. Toth, W. Weintraub, P. J. Woods, C.-H. Yu, E. F. Zganjar, and J. Uusitalo

"In-Beam Gamma-Ray Spectroscopy in the Ground-State Proton Emitter  $^{113}\text{Cs}$ "

Nazarewicz, W. (Invited Presentation)  
"Nuclear Structure Near the Drip Lines"

Radford, D. C., M. Cromaz, and C. J. Beyer (Invited Presentation)  
"Analysis of High-Fold Gamma Data"

Reviol, W., L. L. Riedinger, C. R. Bingham, W. Weintraub, D. Jenkins, R. Wadsworth, A. N. Wilson, S. Juutinen, K. Helariutta, M. P. Carpenter, R.V.F. Janssens, D. Seweryniak, J. Uusitalo, I. Wiedenhover, C. J. Gross, K. S. Toth, J. C. Batchelder, and J. A. Cizewski (Invited Presentation)  
"The Spectroscopy of  $^{183}\text{Tl}$ : An Extreme Case of Prolate-Oblate Shape-Competition"

Toth, K.S., C. R. Bingham, J. C. Batchelder, L. T. Brown, L. F. Conticchio, C. N. Davids, R. J. Irvine, D. Seweryniak, D. M. Moltz, W.B. Walters, J. Wauters, and E. F. Zganjar  
"The  $\alpha$ -Decay Rates of  $^{180,182,184}\text{Pb}$  and the Z = 82 Closure"

Yu, C.-H., C. Baktash, J. Cameron, J. Eberth, D. S. Haslip, D. R. LaFosse, T. Lampman, I. Y. Lee, F. Lerma, A. O. Macchiavelli, S. D. Paul, D. C. Radford, D. Rudolph, D. G. Sarantites, C. E. Svensson, J. C. Waddington, and J. N. Wilson  
"Superdeformed Band in  $^{61}\text{Zn}$ "

Yu, C.-H., C. Baktash, J. Cameron, J. Eberth, D. S. Haslip, D. R. LaFosse, T. Lampman, I. Y. Lee, F. Lerma, A. O. Macchiavelli, S. D. Paul, D. C. Radford, D. Rudolph, D. G. Sarantites, C. E. Svensson, J. C. Waddington, J. C. Wells, and J. N. Wilson

"Highly Deformed Rotational Bands in  $^{65}\text{Zn}$ "

Yu, C. H., J. C. Batchelder, C. Bingham, R. Grzywacz, K. Rykaczewski, Y. Akovali, C. Baktash, A. Galindo-Uribarri, T. N. Ginter, C. J. Gross, M. Karny, S. H. Kim, B. D. MacDonald, S. D. Paul, D. C. Radford, J. Szerypo, K. S. Toth, and W. Weintraub

"In-Beam Spectroscopy Study of the Proton Emitter  $^{151}\text{Lu}$ "

**216 American Chemical Society Meeting, Boston, Mass., Aug. 23-27, 1998**

Garrett, J. D.

"Probing the Limits of Nuclear Stability with the New Holifield Radioactive Ion Beam Facility at ORNL"

**ACS Symposium on Nuclear Structure at Low Excitation Energies, Boston, Mass., Aug. 23-27, 1998**

Toth, K. S.

"Particle Decay Investigations at the Holifield Radioactive Ion Beam Facility"

**International Nuclear Physics Conference (INPC/98), Paris, France, Aug. 24-28, 1998**

Batchelder, J. C., C. R. Bingham, T. Davinson, T. N. Ginter, C. J. Gross, R. Grzywacz, J. W. McConnell, B. McDonald, A. Piechaczek, K. Rykaczewski, K. S. Toth, W. B. Walters, P. J. Woods, and E. F. Zganjar

"Recent Results of Particle Decay Studies at the Holifield Radioactive Beam Facility"

Bingham, C. R., J. C. Batchelder, C. N. Davids, T. N. Ginter, C. J. Gross, R. Grzywacz, R. J. Irvine, B. McDonald, A. Piechaczek, W. Reviol, K. Rykaczewski, D. Seweryniak, K. S. Toth, W. B. Walters, J. Wauters, J. L. Wood, X. J. Xu, J. Uusitlo, and E. F. Zganjar

"Study of the  $h_{9/2}$  and  $s_{1/2}$  Intruder States in Tl and Bi Isotopes Through Alpha Decay States"

Nazarewicz, W. (Invited Presentation)

"Nuclear Structure"

Plasil, F.

"The PHENIX Experiment at RHIC"

**XXXIII Zakopane School of Physics: Trends in Nuclear Physics, Zakopane, Poland, Sept. 1-9, 1998**

Kormicki, J., H. K. Carter, D. W. Stracener, J. R. Beene, and R. F. Welton

"Radioactive Ion Beam Development at HRIBF"

Rykaczewski, K., J. C. Batchelder, C. R. Bingham, T. Davinson, T. N. Ginter, C. J. Gross, R. Grzywacz, Z. Janas, M. Karny, B. D. MacDonald, J. F. Mas, J. W. McConnell, A. Piechaczek, R. C. Slinger, J. Szerypo, K. S. Toth, W. B. Walters, P. J. Woods, E. F. Zganjar, W. Nazarewicz, and P. B. Semmes (Invited Presentation)

"Studies of Nuclei At and Beyond the Proton Drip-Line with Stable and Radioactive Beams at HRIBF"

**Second International Workshop on the Identification of Dark Matter, Sept. 7-11, 1998, Buxton, England**

Mezzacappa, A., and S. W. Bruenn (Invited Presentation)

"Cosmic Closure: Relating to the Ultimate Fate of Massive Stars and the Ultimate Fate of the Universe"

**International Conference on Physics of Highly Charged Ions, Bensheim, Germany,  
Sept. 14-18, 1998**

Meyer, F. W., and V. A. Morozov

"Multicharged Ion-Surface Interaction Studies at ORNL with Decelerated Beams"

Morozov, V. A., F. W. Meyer, and P. Roncin

"Multi-Coincidence Studies as a Technique for the Investigation of Ion-Surface Interaction"

Smith, A.C.H., M. E. Bannister, Y.-S. Chung, N. Djuric, G. H. Dunn, B. Wallbank, and O. Woitke

"Near-Threshold Electron-Impact Excitation of Multiply-Charged Be-Like Ions"

**Workshop on Future Directions in Supernova Research: Progenitors to Remnants,  
Assergi, Italy, Sept. 29-Oct. 2, 1998**

Mezzacappa, A., and S. W. Bruenn (Invited Presentation)

"Future Directions in Simulations of Core Collapse Supernovae"