Ani Aprahamian

Department of Physics
University of Notre Dame
Notre Dame, IN 46556

Phone: (574) 631-8120
Fax: (574) 631-5952
e-mail: aprahamian.1@nd.edu

Date of Birth: August 15, 1958
Citizenship: USA

Professional Preparation

1986	Ph.D.	Clark University
1980	B.A.	Clark University

Appointments

2006-present	IPA at NSF Physics Division	
2003-2005	Dept. Chair	University of Notre Dame, IN
1999-2003	Professor of Physics	University of Notre Dame, IN
1994-1999	Associate Professor	University of Notre Dame, IN
1989-1994	Assistant Professor	University of Notre Dame, IN
1985-1989	Postdoctoral Research Fellow	LLNL, CA

Professional Activities

APS-Fellow, ACS, AAAS, Sigma Xi, New York Academy of Science.

2007-09	Chair of GANIL Scientific Council
2008-13	JINA rep. on EMMI(Helmholtz Center, GSI Germany)Scientific Council EMMI is Extremes of Density and Temperature, Cosmic Matter in the Laboratory
2007	Chair of APS Division of Nuclear Physics Bonner Prize Committee
2005-07	DNP Executive Committee
2004-06	Chair ATLAS Users Exec. Committee
2004-06	Nuclear Science Advisory Committee
2003-05	National Academies NRC Committee on Smaller Facilities
2004-05	National Laser Facility Users Committee
2005	Organizer 12^{th} Capture Gamma Ray & Related Topics, Notre Dame
2003-05	WECAN Steering Committee of Women Encouraging Competitive Advancement in Nuclear Science), DNP, APS
2002-05	NSCL Users Executive Committee

Synergistic Activities

2007	RIA Summer School lectures on Intro. to Nuclear Astrophysics
2006	Award of Appreciation from College of Arts and Letters, Univ. of Notre Dame
2006-07	Senior Fellow of The Collegium Common Room (The Liberal Arts and the 21st Century Intellectual Quest)
2006-present	Fellow of Reilly Center for Science, Technology, and Values, Univ. of Notre Dame
1992-07	Undergraduate Research Mentoring (46) Twenty of them were women
2000-07	Research Experience for High School Teachers (3)

Publications

Refereed Papers: 101(37 since 04) Invited Talks: 62 Seminars/Colloquia: 78(10)
Public Lectures: 17

Ten favorite recent publications

1. **"Lowest excited states in ^{13}O,"** B.B. Skorodumov, G.V.Rogachev, P. Boutachkov, A. Aprahamian, V.Z. Goldberg, S. Almarez, H. Amro, F.D. Becchetti, S. Brown, Y. Chen, H. Jiang, J.J. Kolata, L.O. Lamm, M. Quinn, and A. Woehr, Phys. Rev. C 75, 024607 (2007).
2. **"Measurement of Conversion Electrons with the ^{208}Pb(p,n)^{208}Bi Reaction and**

Derivation of the Shell Model Proton Neutron Hole Interaction from the Properties of ^{208}Bi," K.H. Maier, T. Kibedi, G.D. Dracoulis, P. Boutachkov, A. Aprahamian, A.P. Byrne, P.M. Davidson, G.J. Lane, M. Marie-Jeanne, P. Nieminen, and H. Watanabe, Phys. Rev. C 76, 064304 (2007).

3.**"TOF-Bp mass measurements of very exotic nuclides for astrophysical calculations at the NSCL,"** M Mato, A Estrade, M Amthor, A Aprahamian, D Bazin, A Becerril, T Elliot, D Galaviz, A Gade, S Gupta, G Lorusso, F Montes, J Pereira, M Portillo, A M Rogers, H Schatz, D Shapira, E Smith, A Stolz and M Wallace Journal of Physics G - Volume: 35, Issue: 1, December 2007 1.

4. **"β-decay half-lives and β-delayed neutron emission probabilities for neutron rich nuclei close to the N=82 r-process path,"** F. Montes, A. Aprahamian, O. Arndt, A. Estrade, P.T. Hosmer, K.-L. Kratz, N. Liddick, P.F. Mantica, A.C. Morton, W.F. Mueller, M. Ouellette, E. Pellegrini, B. Pfeiffer, P. Reeder, P. Santi, H. Schatz, A. Stolz, B.E. Tomlin, W.B. Walters, and A. Woehr, Phys. Rev. C, 73, 035801 (2006).

5. **"Investigation of the ^{19}Na nucleus via resonance elastic scattering,"** B.B. Skorodumov, G.V. Rogachev, P. Boutachkov, A. Aprahamian, J.J. Kolata, L.O. Lamm, M. Quinn and A. Woehr, Physics of Atomic Nuclei 69, 1979 (2006).

6. **"Complete Spectroscopy of the ^{162}Dy nucleus,"** A. Aprahamian, X. Wu, S.R. Lesher, D.D. Warner, W. Gelletly, H.G. Brner, F. Hoyler, K. Schreckenbach, R.F. Casten, Z.R. Shi, D. Kusnezov, M. Ibrahim, A.O. Macchiavelli, M.A. Brinkman, and J.A. Becker, Nucl. Phys. A 764, 42-78 (2006).

7. **"Study of the low spin states of ^{208}Bi through spectroscopy,"** P. Boutachkov, K.H. Maier, A. Aprahamian, G.V. Rogachev, L.O. Lamm, M. Quinn, B.B. Skorodumov, A. Woehr, Nucl. Phys. A 768, 22-42 (2006).

8.**"Nuclear structure aspects in nuclear astrophysics,"** A. Aprahamian, K. Langanke, and M. Wiescher, Progress in Particle and Nuclear Physics 54, 535-613 (2005).

9. **"Doppler shift as a tool for studies of isobaric analog states of neutron-rich nuclei: application to ^{7}He,"** P. Boutachkov, G.V. Rogachev, V.Z. Goldberg, A. Aprahamian, F.D. Becchetti, J.P. Bychowski, Y. Chen, G. Chubarian, P.A. DeYoung, J.J. Kolata, L.O. Lamm, G.F. Peaslee, M. Quinn, B.B. Skorodumov, and A. Woehr, Phys. Rev. Lett. 95, 132502 (2005).

10.**"Half-Life of the Doubly Magic r-Process Nucleus ^{78}Ni,"** P.T. Hosmer, H. Schatz, A. Aprahamian, O. Arndt, R.R.C. Clement, A. Estrade, K.-L. Kratz, S.N. Liddick, P.F. Mantica, W.F. Mueller, F. Montes, A.C. Morton, M. Ouellette, E. Pellegrini, B. Pfeiffer, P. Reeder, P. Santi, M. Steiner, A. Stolz, B.E. Tomlin, W.B. Walters, and A. Whr, Phys. Rev. Lett. 94, 112501 (2005).

International Collaboration in last 48 months

ISTC: Armenia **Radiological Characterization and Database Creation in Support of ANPP Decommissioning Planning**

RISING Collaboration, GSI,Germany

Ph.D. advisor	**Postdoctoral advisors**
D.S. Brenner	G. Struble, R.A. Meyer
Ph.D. advisees	**Postdoctoral advisees**
Susan M. Fischer, Xiang Wu,	Timothy Johnson, Joachim Döring,
Robert C. de Haan, Artur Teymurazyan	Stuart Vincent,Mark Shawcross,
Plamen Boutachkov, Irina Zartova	Andreas Woehr
Boris Skoromudov, Mathew Quinn	Wan peng Tan(6)
Sergio Alamarez, Brian Bucher (10)	Henryk Mach (Visiting Scientist)