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Personal Information

Name :Menekşe
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Date of Birth : 27 Eylül 1979

Education

B.Sc (1997- 2001) : Department of Physics, Faculty of Science, Ankara University
M.Sc (2001– 2004) : Ankara University, Graduate School of Natural and Applied Sciences, Department of Physics
M.Sc Thesis : The Application of HN method for polarization problems in plane geometry
Ph.D (2004 –2011) : Ankara University, Graduate School of Natural and Applied Sciences, Department of Physics
Ph.D Thesis : The interaction of gamma rays emitted after nuclear reactions and neutrons with germanium detector systems

Professional Employment Record

2002- 2011 :Research Assistant, Ankara University, Faculty of Science, Department of Physics

2011-2018 : Physicist, Ankara University, Institute of Accelerator Technologies

2018 - :Assistant Professor, Ankara University, Faculty of Science,
Department of Physics

Research Areas

- **Nuclear Physics:** Nuclear structure, experimental investigation of compressional-mode giant resonances, Isoscalar Giant Monopole Resonance, Isoscalar Giant Dipole Resonance, detector arrays-AGATA
- **Radiative Transfer:** Applications of vector equation of transfer
- **Neutron Transport Theory**

Research Scholarship

01.04.2015-01.10.2015, 6 months, TÜBİTAK, University of Notre Dame, Indiana, USA,-
“Investigations on the nuclear incompressibility from the giant monopole resonance in nuclei”

Publications International

1. Y.K. Gupta, K.B. Howard, U. Garg, J.T. Matta, **M. Şenyiğit**, M. Itoh, S. Ando, T. Aoki, A. Uchiyama, S. Adachi, M. Fujiwara, C. Iwamoto, A. Tamii, H. Akimune, C. Kadono, Y. Matsuda, T. Nakahara, T. Furuno, T. Kawabata, M. Tsumura, M.N. Harakeh, N. Kalantar-Nayestanaki, Isoscalar Giant Monopole, Dipole, and Quadrupole Resonances in Zr-90, Zr-92 and Mo-92, Physical Review C, 97(6) 2018.
2. **Şenyiğit M.**, The Distribution of Angular Flux for Slab Albedo Problem, GU J Sci, 31(3) 2018.
3. Güleçyüz, M. Ç., **Şenyiğit M.**, Ersoy A., Milne problem for non-absorbing medium with extremely anisotropic scattering kernel in the case of specular and diffuse reflecting boundaries, Indian J Phys, 92(1), 2017.
4. Y.K. Gupta, U. Garg, K.B. Howard, J.T. Matta, **M. Şenyiğit**, M. Itoh, S. Ando, T. Aoki, A. Uchiyama, S. Adachi, M. Fujiwara, C. Iwamoto, A. Tamii, H. Akimune, C. Kadono, Y. Matsuda, T. Nakahara, T. Furuno, T. Kawabata, M. Tsumura, M.N.

Harakeh, N. Kalantar-Nayestanaki, Are there nuclear structure effects on the isoscalar giant monopole resonance and nuclear incompressibility near $A=90$?, Physics Letters B, 760, pp 482-485, 2016.

5. **M. Şenyiğit**, Half space albedo problem for the nonconservative vector equation of transfer with a combination of Rayleigh and isotropic scattering, Astrophys Space Sci, 361(9), pp 318, 2016.
6. **M. Şenyiğit**, A. Ataç, S. Akkoyun, A. Kaşkaş, D. Bazzacco, J. Nyberg, F. Recchia, S. Brambilla, F. Camera, F. C. L. Crespi, E. Farnea, A. Giaz, A. Gottardo, R. Kempley, J. Ljungvall, D. Mengoni, C. Michelagnoli, B. Million, M. Palacz, L. Pellegrini, S. Riboldi, E. Şahin, P. A. Söderström, J. J. Valiente Dobon, and the AGATA collaboration, Identification and rejection of scattered neutrons in AGATA, Nucl. Instr. And Meth. A, 735, pp 267-276, 2014.
7. S. Akkoyun, A. Algora, B. Alikhani, et al., AGATA - Advanced Gamma Tracking Array, Nucl. Instr. And Meth. A, 668, pp 26-58, 2012.
8. A. Ataç, A. Kaşkaş, S. Akkoyun, **M. Şenyiğit**, T. Hüyük, S. O. Kara, J. Nyberg, Discrimination of gamma rays due to inelastic neutron scattering in AGATA, Nucl. Instr. And Meth. A, 607, pp 554-563, 2009.
9. **M. Karahasanoğlu Şenyiğit**, A. Kaşkaş, The HN method for Milne problem with polarization, Astrophys Space Sci, Vol. 310, pp 85-91, 2007.
10. A. Kaşkaş, **M. Karahasanoğlu**, and M. Ç. Güleçyüz, Neutron transport problems for extremely anisotropic scattering, Kerntechnik, Vol 71, No:5-6, pp 290,2006.

Publications National

1. **Şenyiğit M.**, Solution of Vector Equation of Transfer in a Finite Plane Parallel Media, Cumhuriyet Sci. J., 39 (3) 2018.

Attendant International Conferences

1. **Şenyiğit M.**, The Neutron Angular Flux Distribution in a Finite Slab, Türk Fizik Derneği 34. Uluslararası Fizik Kongresi, Bodrum, Türkiye, 2018.
2. **Şenyiğit M.**, Applications of the Nonconservative Vector Equation of Transfer, Türk Fizik Derneği 33. Uluslararası Fizik Kongresi, Bodrum, Türkiye, 2017.
3. **Y. K. Gupta**, U. Garg, K. Howard, M. Senyigit et.al, Are There Nuclear Structure Effects on the Isoscalar Giant Monopole Resonance Near $A=90$?, The 5th International Conference on "Collective Motion in Nuclei Under Extreme Conditions", Krakow, Poland, 2015.
4. **Şenyiğit M.**, Akkoyun S., Atac A., Kaskas A., The neutron-gamma discrimination using ^{252}Cf source with four AGATA triple clusters, EGAN 2011, Padova, Italy, 2011.

5. **Senyigit M.**, AGATA Demonstrator Test with a ^{252}Cf Source: Neutron-Gamma Discrimination, NEDA-New Neutron Detector for SPIRAL2 Collaboration Meeting, İstanbul, 2009.
6. **Menekşe Senyiğit**, Ayşe Kaşkaş, Half-space albedoproblem in a Rayleigh scattering atmosphere with true absorption, The Fifth International Symposium on Radiative Transfer, Bodrum, 2007
7. **M. Karahasanoğlu Senyiğit**, A. Kaşkaş, The effect of extremely anisotropic scattering on the critical slab problem in one-speed neutron transport theory, Nuclear Science and Its Application, Baku-Azerbaycan, 2006.

Attendant National Conferences

1. **Karahasanoğlu M.**, Kaşkaş A., H_N Yönteminin Düzlem Geometrideki Kutuplanma Problemlerine Uygulanması : Milne Problemi, Türk Fizik Derneği 22. Fizik Kongresi, Bodrum, 2004.
2. **Karahasanoğlu M.**, Kaşkaş A., Yarı-uzay Albedo Probleminin Anizotropik Saçılma Durumunda İncelenmesi, IX. Ulusal Nükleer Bilimler ve Teknolojileri Kongresi, İzmir, 2005.

Projects

1. Researcher, "2006K-120470" Electron Accelerator and Radiation Laboratory (TARLA), 2018-
2. Researcher, Denizlerde Albedo Tahmini için Algoritmalar Kurulması, 2006-2008.
3. Researcher, Gamma Spektroskopisinde İz Sürme Tekniğinin Geliştirilmesi ve AGATA Projesine Aktif Katılım, 2006-2009.