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### **Personal Information**

#### **Education, Degrees**

**1997 - 2001** : Physics Department, Ankara University ; B. Sc.

**2001 - 2004** : Physics Department, Ankara University ; M. Sc.

**2004 - 2011** : Physics Department, Ankara University ; Ph. D.

#### **Professional Employment Record**

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

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

#### **Research Speciality and Interests**

1. Nuclear Physics
2. Radiative Transfer
3. Neutron Transport Theory

#### **Research Scholarship**

01.04.2015-01.10.2015, TÜBİTAK, University of Notre Dame, Indiana, USA,- "Giant resonances-nuclear incompressibility"

#### **Publications International**

1. 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  $A \sim 90$ ?, Physics Letters B, 760, pp 482-485, 2016.
2. **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
  3. **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. Pellegri, 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.
  4. S. Akkoyun, A. Algora, B. Alikhani, et al., AGATA - Advanced Gamma Tracking Array, Nucl. Instr. And Meth. A, 668, pp 26-58, 2012.
  5. 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.
  6. **M. Karahasanoğlu Şenyiğit**, A. Kaşkaş, The HN method for Milne problem with polarization, Astrophys Space Sci, Vol. 310, pp 85-91, 2007.
  7. A. Kaşkaş, **M. Karahasanoğlu**, and M. Ç. Güleçyüz, Neutron transport problems for extremely anisotropic scattering, Kerntechnik, Vol 71, No:5-6, pp 290,2006.

### **Reports**

1. **M. Şenyiğit**, S. Akkoyun, A. Ataç, A. Kaşkaş, J. Nyberg, D. Bazzacco, S. Brambilla, F. Camera, J. J. Valiente Dobon, E. Farnea, A. Gottardo, R. Kempley, J. Ljungvall, D. Mengoni, B. Million, M. Palacz, L. Pellegri, F. Recchia, S. Riboldi, P. A. Söderström, E. Şahin and the AGATA Collaboration, AGATA Demonstrator Test with a  $^{252}\text{Cf}$  source: Neutron-Gamma Discrimination, 2010 LNL Annual Report, pp 56-57, 2011.

### **Attendant International Conferences**

1. **Senyigit M.**, Akkoyun S., Atac A., Kaskas A., The neutron-gamma discrimination using  $^{252}\text{Cf}$  source with four AGATA triple clusters, EGAN 2011, Padova, Italy, 2011.
2. **Senyigit M.**, AGATA Demonstrator Test with a  $^{252}\text{Cf}$  Source: Neutron-Gamma Discrimination, NEDA-New Neutron Detector for SPIRAL2 Collaboration Meeting, İstanbul, 2009.
3. **M. Karahasanoğlu Şenyiğit**, 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-Azerbaijan, 2006.

4. Kaşkaş A., **Karahasanoğlu M.**, On a Problem with Extremely Anisotropic Scattering in Slab, Nuclear Science and Its Application, Baku, Azerbaijan, 2006.

#### **Attendant National Conferences**

1. **Karahasanoğlu M.**, Kaşkaş A., HN 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.

#### **Posters**

**Menekşe Şenyiğit**, Ayşe Kaşkaş, Half-space albedoproblem in a Rayleigh scattering atmosphere with true absorption, The Fifth International Symposium on Radiative Transfer, Bodrum, 2007.

#### **Attended Summer Schools**

1. 20th Euroschool on Exotic Beams, Dubna-Russia, 2013.
2. Radyasyon Dedeksiyon Ölçüm Yöntemleri ve Medikal Fizikte Radyasyonla Görüntüleme Yaz Okulu, Ankara-Türkiye, 2013.
3. The 6th Balkan School on Nuclear Physics, Troyan-Bulgaria, 2008.
4. Summer School IV on Nuclear Collective Dynamics, Istanbul-Turkey, 2008.

#### **Thesis**

M.S. Thesis: The application of HN method for polarization problems in plane geometry, Supervisor: Prof. Dr. Ayşe KAŞKAŞ, 2004.

Ph D. Thesis: The interaction of gamma rays emitted after nuclear reactions and neutrons with germanium detector systems, Supervisor: Prof. Dr. Ayşe KAŞKAŞ, Co-supervisor: Prof. Dr. Ayşe ATAÇ NYBERG, 2011.