

# CURRICULUM VITAE

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## **Education:**

1989-1994: Middle East Technical University, Faculty of Arts and Sciences, B. S. Program, Physics Department.

1994-1996: Middle East Technical University, Graduate School of Natural and Applied Sciences, M. S. Program, Physics Department. M. S. thesis on Av-N(HI) relation under supervision of M. A. Alpar and O. H. Guseinov.

1996-2002: Middle East Technical University, Graduate School of Natural and Applied Sciences, Ph. D. Program, Physics Department. PhD thesis on supernova remnants, pulsars and runaway O-B stars under supervision of U. Kızıloğlu and O. H. Guseinov.

## **Job Experience:**

### **M.E.T.U., 1996–2002**

Research Assistant at Middle East Technical University, Department of Physics.

- Classical Mechanics and Classical Electricity & Magnetism Labs
- Phys215 (Waves and Oscillations) Assistant
- Phys221 (Optics and Waves) Assistant

### **TÜBİTAK–Boğaziçi University Feza Gürsey Institute, 2002–2005**

Post-Doc Researcher

**Boğaziçi University, Department of Physics, 2003–2005**

Part-time Instructor

- Phys345 'Classical Astronomy' (2003-2004)
- Phys346 'Introduction to Astrophysics' (2004-2005)
- Phys572 'High Energy Astrophysics' (2005)

**Boğaziçi University, Department of Physics, 2005–2006**

Assistant Professor

Courses given: Phys-130,345,346,572

**Boğaziçi University, Department of Physics, 2006–**

Associate Professor

Courses Given: Phys-101,102,121,130,201,202,311,312,345,346,407,408

**Job Experience Abroad****University of Amsterdam, 1999–2000**

Worked as a researcher (supported by TÜBİTAK-BAYG-BDP) at Anton Pannekoek High Energy Astrophysics Institute, Amsterdam, The Netherlands. Worked as a member of the High Energy Astrophysics Group of E. P. J. van den Heuvel at University of Amsterdam. Worked with L. Kaper on the evolution of "runaway" high-mass X-ray binaries and massive stellar evolution at University of Amsterdam. Had a collaboration with the High Energy Astrophysics Group at University of Leiden.

**Publication List:****Journal Articles**

- "Relations Between Av and N(HI) for 14 Chosen Directions", Aydin, C., Albayrak, B., Ankay, A., Guseinov, O. H. (1997). Turkish Journal of Physics, 21, 852.
- "Using the Values of N(HI) and Av to Improve the Distances to Some X-Ray Binaries and Supernova Remnants", Ankay, A and Guseinov, O.

- H. (1998). *Astronomical and Astrophysical Transactions*, 17, 301.
- "Masses of Neutron Stars and Blackholes Born in Close Binary Systems", Tagieva, S. O., Ankay, A., Guseinov, O. H., Sezer, A. (2000). *Astronomical and Astrophysical Transactions*, 19, 123.
  - "A Preliminary Version of a Catalog of High- and Low-mass X-ray Binaries", Guseinov, O. H., Saygac, A. T., Allakhverdiev, A. O., Caliskan, H., Ozdemir, S., Yerli, S. K., Ankay, A. (2000). *Astronomy Letters*, 26, 725.
  - "The Origin of the Runaway High-mass X-ray Binary HD 153919/4U 1700-37", Ankay, A., Kaper, L., de Bruijne, J. H. J., Dewi, J., Hoogerwerf, R., Savonije, G. J. (2001). *Astronomy & Astrophysics*, 370, 170.
  - "Pulsar Spin-down by a Fallback Disk and the  $P - \dot{P}$  Diagram", Alpar, M. A., Ankay, A., Yazgan, E. (2001). *Astrophysical Journal*, 557, L61.
  - "Associations of Different Types of Neutron Stars with Supernova Remnants", Tagieva, S. O. and Ankay, A. (2003). *Astronomical and Astrophysical Transactions*, 22, 59.
  - "On Period and Burst Histories of AXPs and SGs and the Possible Evolution of These Objects on the  $P - \dot{P}$  Diagram", Guseinov, O. H., Yazgan, E., Ankay, A., Tagieva, S. O. (2003). *International Journal of Modern Physics D*, 12, 1.
  - "The Relation Between the Surface Brightness and the Diameter for Supernova Remnants", Guseinov, O. H., Ankay, A., Sezer, A., Tagieva, S. O. (2003). *Astronomical & Astrophysical Transactions*, 22, 273.
  - "Do Young Neutron Stars Which Show Themselves As AXPs, SGs and Radio Pulsars Accrete?" Tagieva, S. O., Yazgan, E., Ankay, A. (2003). *International Journal of Modern Physics D*, 12, 825.
  - "Observational Data on Galactic Supernova Remnants I: the SNRs

within  $l = 0^\circ - 90^\circ$ ", Guseinov, O. H., Ankay, A., Tagieva, S. O., (2003), Serbian Astronomical Journal 167, 95.

- "Environments of Supernova Remnants Which Contain Different Types of Neutron Star" Guseinov, O. H., Ankay, A., Tagieva, S. O. (2004), Astrophysics and Space Science 289, 23.

- "Dependence of the X-ray Luminosity and Pulsar Wind Nebula on Different Parameters of Pulsars and the Evolutionary Effects" Guseinov, O. H., Ankay, A., Tagieva, S. O., Taskin, M. O. (2004), International Journal of Modern Physics D, 13, 197.

- "The Strong Magnetic Field Decay and Evolution of Radio Pulsars on the P-Pdot Diagram" Guseinov, O. H., Ankay, A., Tagieva, S. O. (2004), International Journal of Modern Physics D 13, 1805.

- "Observational Data on Galactic Supernova Remnants II: the SNRs within  $l = 90^\circ - 270^\circ$ ", Guseinov, O. H., Ankay, A., Tagieva, S. O. (2004), Serbian Astronomical Journal 168, 55.

- "Effects of the Background Radiation on Radio Pulsar and Supernova Remnant Searches and the Birth Rates of These Objects" Ankay, A., Guseinov, O. H., Tagieva, S. O. (2004), Astronomical and Astrophysical Transactions 23, 503.

- "Observational Data on Galactic Supernova Remnants III: the SNRs within  $l = 270^\circ - 360^\circ$ ", Guseinov, O. H., Ankay, A., Tagieva, S. O. (2005), Serbian Astronomical Journal 169, 65.

- "Early Phases of Different Types of Isolated Neutron Star", Ankay, A., Sahin, S., and Karanfil, G., Yazgan, E. (2005), International Journal of Modern Physics D 14, 1075.

- "Birth Rates of Different Types of Neutron Star and Possible Evolutions of These Objects" Guseinov, O. H., Ankay, A., Tagieva, S. O. (2005), International Journal of Modern Physics D 14, 643.

- Influence of Neutron Star Parameters on Evolutions of Different Types of Pulsar" Guseinov, O. H., Ankay, A., Tagieva, S. O. (2005),

Astrophysics and Space Science 298, 553.

- "Searching for Runaway OB Stars in Supernova Remnants", Guseinov, O. H., Ankay, A., Tagieva, S. O. (2005), Astrophysics 48, 393.
- "Influences of Physical Parameters of Neutron Stars on Their Positions on the P- $\dot{P}$  Diagram", Guseinov, O. H., Ankay, A., Tagieva, S. O. (2005), International Journal of Modern Physics D, 14, 1465.
- "Possible Evolution of Dim Radio Quiet Neutron Star 1E 1207.4-5209 Based on a B-decay Model" Ankay, A., Mert-Ankay, A., Ercan, E. (2007), International Journal of Modern Physics D, 16, 619.
- "Magnetospheric Particle Acceleration and X-ray Emission of Pulsars" Tagieva, S. O., Ankay, A., Ankay, A. M. (2008), International Journal of Modern Physics D, 17, 2337.
- "E 1207.4-5209-Like Radio-Quiet Neutron Stars" Ankay A. M., Hudaverdi, M., Ercan, E., Ankay, A. (2009), International Journal of Modern Physics D, 1, 1991.
- "Temporal Evolution of Isolated Pulsars; Age-Tau Problem" Kutukcu, P, Ankay, A. (2014), International Journal of Modern Physics D, 23, 10.
- "Discovery of an OB Runaway Star Inside SNR S147" Dincel, B., Neuhauser, R., Yerli, S. K., Ankay, A. et al. (2015), Monthly Notices of the Royal Astronomical Society, 448, 3196.
- "On the Galactic Distributions of Radio Pulsars and Plasma Density" Ankay, A., Yazgan, E., Kutukcu, P. (2016), Serbian Astronomical Journal, 193, 1.
- "Distances of Galactic Radio Pulsars; First Quadrant" Kutukcu, P., Ankay, A., Yazgan, E., Bozkurt, K. (2022), Monthly Notices of the Royal

Astronomical Society, 511, 4669.

### **Books**

- "Analysis of Fall-Back Disk and Magnetar Models of Anomalous X-ray Pulsars and Soft Gamma Repeaters", Yazgan, E., Guseinov, O. H., Ankay, A., Taskin, M. O. and Tagieva, S. O. (2005), Progress in Neutron Star Research, edi. by Andrew P. Wass, Nova Science Publishers - New York (ISBN: 1-59454-351-8), pp.119-137.
- "Neutron Stars, Supernovae and Supernova Remnants" edi. by Efe Yazgan, Askin Ankay and Oktay H. Guseinov (2007), Nova Science Publishers - New York, (ISBN: 1-60021-548-3).

### **Articles in Conference Proceedings**

- "A New Sigma-D Relation to Estimate Distances of Supernova Remnants" Ankay, A. (1994). National Astronomy Meeting, METU, Ankara, Turkey.
- "Interstellar Medium" Aydin, C., Ankay, A. and Guseinov, O. H. (1996). National Astronomy Meeting, Istanbul University, Istanbul, Turkey.
- "A New Approach to the Distances of Supernova Remnants" Allakhverdiev, A. O. and Ankay, A. (1996). National Astronomy Meeting, Istanbul University, Istanbul, Turkey.
- "Statistical Investigations of High and Low Mass X-ray Binaries" Guseinov, O. H., Ankay, A. and Tagieva, S. O., NATO ASI, 'Variable Stars as Important Astrophysical Tools' (1998), Cesme, Izmir, Turkey.
- "Genetic Connections Between Supernova Remnants, Neutron Stars, and OB Runaways: Beyond the Evolution of Massive Binaries" Ankay, A., 'New Directions for Close Binary Stars: The Royal Road to the Stars' (2002), International Meeting held in Canakkale, Turkey. Publ. COMU Ap. Research Center. Vol.3, p.265-270.
- "Genetic Connections Between Supernova Remnants, Anomalous

X-ray Pulsars, and Soft Gamma Repeaters” Ankay, A. (2002). National Astronomy Meeting, TÜBİTAK National Observatory (TUG), Antalya, Turkey.

- ”Supernova Remnant Environments” Ankay, A. (2002). National Astronomy Meeting, TÜBİTAK National Observatory (TUG), Antalya, Turkey.

- ”OB Runaway Stars inside the Supernova Remnants S147 and IC443” Dincel, B., Neuhauser, R., Yerli, S. K., Ankay, A. et al. (2016). Supernova Remnants: An Odyssey in Space after Stellar Death, Proceedings of the Conference held 6-11 June 2016, in Chania, Greece.

#### **Arxiv Papers & Observation Reports**

- ”Genetic Connections of Anomalous X-ray Pulsars and Soft Gamma Repeaters with Supernova Remnants” Ankay, A., Guseinov, O. H., Alpar, M. A., Tagieva, S. O., astro-ph/0110092.

- ”GRB020813, Optical Observations” Kiziloglu, U., Alpar, M. A., Baykal, A., Yerli, S. K.; Ankay, A., et al. (2002), GRB Coordinates Network, 1488, 1.

- ”The Lower Limit for the Mass of Progenitors of Supernova Remnants and Radio Pulsars” Tagieva, S. O., Guseinov, O. H., Ankay, A., astro-ph/0306117.

- ”Acceleration of Particles in Pulsar Magnetosphere and the X-ray Radiation” Guseinov, O. H., Ankay, A., Tagieva, S. O., astro-ph/0401114.

#### **Projects:**

- TÜBİTAK (115F028, 12ARTT150-267, TBAG-CG4).

- Boğaziçi University BAP (11B03P3, 16B03P7, 19B03P5).