

## Assoc. Prof. MEHMET ATAKAN GÜRKAN

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: W-5016-2018

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### Education Information

Undergraduate, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, Turkey 1992 - 1996

### Research Areas

Astronomy and Astrophysics, Mathematical Methods in Physics

### Advising Theses

Gürkan M. A., Semi-analytical calculations of the secular evolution of 4-body systems, Postgraduate, F.KIROĞLU(Student), 2019

### Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Irregular longitudinal data analysis with statistical and machine learning methods for hazardous asteroids**

TANRIVERDİ İ., İLK DAĞ Ö., GÜRKAN M. A.

Astronomy and Computing, vol.47, 2024 (SCI-Expanded)

- II. **Fractal geometry of angular momentum evolution in near-Keplerian systems**

GÜRKAN M. A.

MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY, vol.411, no.1, 2011 (SCI-Expanded)

- III. **Resonant relaxation near a massive black hole: the dependence on eccentricity**

Guerkan M. A., Hopman C.

MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY, vol.379, no.3, pp.1083-1088, 2007 (SCI-Expanded)

- IV. **The present day mass function in the central region of the Arches cluster**

Portegies Zwart S., Gaburov E., Chen H., GÜRKAN M. A.

MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY, vol.378, no.1, 2007 (SCI-Expanded)

- V. **Runaway collisions in young star clusters - II. Numerical results**

- Freitag M., GÜRKAN M. A., Rasio F.  
MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY, vol.368, no.1, pp.141-161, 2006 (SCI-Expanded)
- VI. **Massive black hole binaries from collisional runaways**  
GÜRKAN M. A., Fregeau J., Rasio F.  
ASTROPHYSICAL JOURNAL, vol.640, no.1, 2006 (SCI-Expanded)
- VII. **The disruption of stellar clusters containing massive black holes near the galactic center**  
GÜRKAN M. A., Rasio F.  
ASTROPHYSICAL JOURNAL, vol.628, no.1, pp.236-245, 2005 (SCI-Expanded)
- VIII. **Formation of massive black holes in dense star clusters. I. Mass segregation and core collapse**  
GÜRKAN M. A., Freitag M., Rasio F.  
ASTROPHYSICAL JOURNAL, vol.604, no.2, pp.632-652, 2004 (SCI-Expanded)
- IX. **Monte Carlo simulations of globular cluster evolution. III. Primordial binary interactions**  
Fregeau J., GÜRKAN M. A., Joshi K., Rasio F.  
ASTROPHYSICAL JOURNAL, vol.593, no.2, pp.772-787, 2003 (SCI-Expanded)
- X. **Post-glitch RXTE-PCA observations of the Vela pulsar**  
Gurkan M., Baykal A., Alpar M., Ogelman H., Strohmayer T.  
ASTRONOMY & ASTROPHYSICS, vol.356, no.3, pp.1136-1140, 2000 (SCI-Expanded)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Collisions between single stars in dense clusters: Runaway formation of a massive object**  
Freitag M., Guerkan M. A., Rasio F. A.  
Workshop on Massive Stars in Interacting Binaries, Mauricie, Canada, 16 - 20 August 2004, vol.367, pp.707-709
- II. **Formation of an IMBH in a dense stellar cluster near the Galactic center**  
GÜRKAN M. A., Rasio F.  
222nd Symposium of the International-Astronomical-Union, Gramado, Brazil, 1 - 05 March 2004, pp.179-180
- III. **Run-away IMBH formation in dense star clusters**  
Freitag M., GÜRKAN M. A., Rasio F.  
222nd Symposium of the International-Astronomical-Union, Gramado, Brazil, 1 - 05 March 2004, pp.167-168
- IV. **The radial distribution of millisecond pulsars in 47 Tuc**  
GÜRKAN M. A., Rasio F.  
Conference on New Horizons in Globular Cluster Astronomy, Padua, Italy, 24 - 28 June 2002, vol.296, pp.300-301

## Metrics

Publication: 14

Citation (WoS): 866

Citation (Scopus): 869

H-Index (WoS): 7

H-Index (Scopus): 7