# Mohammad Taghi Mirtorabi

- Birth: [redacted] 1966
- Address:


Department of Physics,
Azzahra University,
Vanak,
Tehran, Iran.


**Educations:**

- Bachelor of Science: Physics, Shiraz University, Shiraz, Iran, 1990.
- Master of Science: Physics and Astronomy, Shiraz University, Shiraz, Iran, 1994.
- Ph.D: Physics and Astronomy, Institute for Advance Studies in Basic Sciences, Zanjan, Iran, 2002.

**Research Interests:**

Solar physics, Late stage of stellar evolution, AGB stars, Pulsating red giant and supergiant stars, Mass loss in evolved stars, Stellar dynamics.

**Professional Activities:**

- Associated Professor of Physics and Astronomy, Azzahra University, 2013-present.
- Assistant Professor of Physics and Astronomy, Azzahra University, 2002-2013.
- Member of editorial board of Nojum Magazine (a monthly magazine about popular astronomy), 1997-2015.

- Chairman of the jury of the Iranian Student Physics Prize, "Rozbeh", awarded annually by Physics Society of Iran, 2002 and 2003.
- Head of the Iranian team participating in the International Astronomy Olympiad (IAO), 2003 - 2007.
- Head of the Iranian team participating in the International Olympiad of Astronomy and Astrophysics, 2003 - 2010,
- Chairman of SOC of the Second Workshop for Amateur Astronomers in "Observation and Analysis of Variable Stars", 2004, Tehran, Iran.
- Chairman of SOC of the Conference of Physics Students, 2004, Tehran, Iran.
- Head of the Iranian team participating in the International Olympiad of Astronomy and Astrophysics, 2019 - Ongoing.

**Computational skills**

- **Languages:** Fortran, C++, Python.
- **Platforms:** Windows, Linux.

**Publications:**


1. Zeinali F., Edalati M. T., Mirtorabi M. T. *Photoelectric Observations of the Eclipsing Variable ER Vulpeculae* 1995, IBVS, 4190.
2. Mirtorabi M. T., Guinan E. F., Wasatonic R. P., Ribas I., Engle S. G. *Starspots and Plages on the Active G8 IV-III Star λ Andromedae,* 2001, AAS, 198.9403.
3. Wasatonic R. P., Mirtorabi M. T., Guinan E. F., Messina S. *Seeing Spots: Wing Near-IR TiO and V-Band Photometry of Chromospherically Active Stars,* 2002, AAS, 199.3305.
4. Mirtorabi M. T., Guinan E. F., Wasatonic R. P., *Wing Near-IR, TiO and V-Band Photometry of Choromospherically Active Star λ Andromedae* , 2003. AJ, 125, 3265.

5. Mirtorabi M. T., Riazi N., *Photometric Observations and Light Curve Studies of the Semi-detached Eclipsing Binary R CMa*, 2006, Ap&SS, 306, 159.

6. Mirtorabi M. T., Javadi Khasraghi A., Abdolrahimi S., *Effects of core magnetic fields in evolution of binary neutron stars,* 2006, IAUJD, 2, 1.

7. Mirtorabi M. T., Javadi Khasraghi A., Abdolrahimi S., *Coupled Spin, Mass, Magnetic field, and Orbital Evolution of Accreting Neutron stars*, 2006, IAUJD, 2, 42.

8. Javadi A., van Loon J. T., Mirtorabi M. T., *JHK variable stars in M33* , 2010, SIMBAD, VizieR On-line Data Catalog: J/MNRAS/411/263.

9. Javadi A., van Loon J. T., Mirtorabi M. T., *The UK Infrared Telescope M33 monitoring project - I. Variable red giant stars in the central square kiloparsec* , 2011, MNRAS, 411, 263, Astro-ph 1009.1822

10. Javadi A., van Loon J. T., Mirtorabi M. T., *The UK Infrared Telescope M33 monitoring project - II. The star formation history in the central square kiloparsec* , 2011, MNRAS, 414, 3394, Astro-ph 1103.0755.

11. Javadi A., van Loon J. T., Mirtorabi M. T., *Infrared Survey of Pulsating Giant Stars in the Spiral Galaxy M33: Dust Production, Star Formation History, and Galactic Structure,*, 2011, ASP Conf. Series, Eds. Franz Kerschbaum, Thomas Lebzelter and Bob Wing Astroph-1101.5271.

12. Nikzat F., Javadi A., Mirtorabi M. T., van Loon J. Th., Khosroshahi H., *Photometry and Stellar Structure Analysis of the Central Regions of the M33 galaxy*, 2013, IAUS, 292, 160.

13. Javadi A., van Loon J. Th., Khosroshahi H., Mirtorabi M. T. *The UK Infrared Telescope M33 monitoring project - III. Feedback from dusty stellar winds in the central square kiloparsec* 2013, MNRAS, 432, 2824, Astro-ph 1304.3782.

14. Mirtorabi T., *A simple procedure to extend the Gauss method of determining orbital parameters from three to N points,* 2014, Ap&SS, 349, 137, astro-ph 1310.3790

15. Habibi, A., Mirtorabi, M. T., Roshan, M., *Local stability criterion for self-gravitating disks in modified gravity* , 2014, Iranian Journal of Astronomy and Astrophysics. Vol 1, No. 2, 95, Astro-ph 1405.6388.

16. Javadi, A., Saberi, M., van Loon J. Th., Khosroshahi H., Golabatooni N., Mirtorabi M. T., *The UK Infrared Telescope M33 monitoring project. IV. Variable red giant stars across the galactic disc* 2015, MNRAS, 447, 3973, Astro-ph 1412.3840.

17. Morabbi, S., Mirtorabi, M. T., *Double Stars as Tracers of Tiny Structures in the Interstellar Medium,* Publications of The Korean Astronomical Society, 2015, 30, 89

18. Azizi, F. Mirtorabi, M. T., *An updated wing TiO sensitive index for classification of M-type stars*, 2015, Ap&SS, 357, 96, Astro-ph 1505.04332

19. Bidaran, B., Mirtorabi, M. T., Azizi, F., *A new titanium oxide index in the visual band*, 2016, MNRAS, 457, 2043.

20. Gheidi Shahran, A., Mirtorabi, M. T., *Proper integration time of polarization signals of inter network regions using Sunrise/IMaX data*, 2016, Iranian Journal of Astronomy and Astrophysics. Vol 2, No. 2, 109.

21. Azizi, F., Mirtorabi, M. T., *A survey of TiO567 nm absorption in solar-type stars*, 2018, MNRAS, Vol 475, 2253.

22. Kianfar, S., Jafarzadeh, S., Mirtorabi, M. T., *Linear Polarization Features in the Quiet-Sun Photosphere: Structure and Dynamics*, 2018, Solar Phys, Vol 293, 123. T.L. Riethmlle

23. Papar, M., Kollath, Z., Shobbrook, R. R., Matthews, J. M., Antoci, V., Benko, J. M., Park, N. K., Mirtorabi, M. T., Luedeke, K., Kusakin, A., Bognar, Zs, Sodor, A., Gracia-Hernandez, A., Pena, J. H., Kuschnig, R., Moffat, A. F. J., Rowe, J., Rucinski, S. M., Sasselov, D., Weiss, W. W., *The Delta Scuti star 38 Eri from the ground and from space* , 2018, Vol 477, Issue 4, 43624379.

24. Najafi, Sh., Mirtorabi,M. T., Ansari, Z., Mota, D.F., *Red giant evolution in modified gravity,* 2019, JCAP02(2019)011.

25. Gholami, M., Mirtorabi, M. T., *The Isaac Newton Telescope Monitoring Project: Stellar Population in the IC 10 Dwarf Irregular Galaxy*, 2019, Iranian Journal of Astronomy and Astrophysics, Vol. 6, No. 1, 53.

26. Rastegarnia, F., Mirtorabi, M. T., Moradi, R., Vafaei Sadr A., Wang, Y., *Deep Learning in Searching the Spectroscopic Redshift of Quasars*, 2022, MNRAS, Vol. 511, 4490.

27. Monfared, S., Abdolvand, N., Mirtorabi, M. T., Rajaee Harandi, S., *Machine Learning Method for Predicting the Merger and Morphology of Galaxies through Near-Infrared Spectroscopy*, 2022, Iranian Journal of Astronomy and Astrophysics, Vol. 9, No. 1, 19, Spring 2022.

28. Parto, T., Dehghani, Sh., Javadi, A., Saremi, E., Van Loon, J., Khosroshahi, H., McDonald, I., Mirtorabi, M. T., Navabi, M., Saberi, M., *The Isaac Newton Telescope Monitoring Survey of Local Group Dwarf Galaxies. V. The Star Formation History of Sagittarius Dwarf Irregular Galaxy Derived from Long-period Variable Stars*, 2023, ApJ, Vol, 942, 13.