

Prof. Dr. Ashraf Ahmed Shaker C.V.
Head of Astronomy Dept. - NRIAG



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- Marital Status : Married.
- Birth date: 18 July 1968- Benysweif- Egypt.
- Nationality: Egyptian.
- Religion: Muslim.
- Sex: Male.
- Position: Professor of Astrophysics - Head of Astronomy dept.- NRIAG since August 2020.
- Associate Professor in NRIAG since April 2013 – March 2022.
- Permanent Position as Lecturer in NRIAG since April 2000, Assistant Researcher since March 1992, Researcher assistant since May 1995.
- Fellowship at Osservatorio Astronomico di Capodimone (OAC) , Napoli Italy from May 1996 till June 1999.
- Fellowship at OAC from November 2000 till April 2001.
- Fellowship at OAC from April 2003 till June 2003.

Qualifications:

- B.Sc. in Astrophysics (May 1990) from Astronomy Dept. – Cairo Univ.
- M.Sc. Thesis titled (Warps in Galaxies) awarded from Cairo Univ. 1995.
- Ph.D. Degree titled (The Physical properties of early – type interacting galaxies) awarded from Cairo University April 2000.

Research activity and experience:

- Member of Egyptian Large Optical Telescope council.
- Member in extragalactic group in NRIAG, and Kottamia Observatory.
- Teaching experience for M.Sc. and Ph.d. students at NRIAG since July 2000.
- Sharing in observational activity in Kottamia 74 inch telescope.
- Observing experience with Loiano Telescope Italy, France 74 inch telescope at Proviencie.
- Member in the Italian Astronomical society.
- Good experience in computer programmes, unix, windows, linux, environment.
- Good experience with astronomical programmes like Iraf, Midas under uix environment.
- Scientific editor of Almegalla Alfalakia from 1998 till 2005, published in arabic by the Italian astronomical society .
- Author of the “releam of galaxies book, in arabic) published in NRIAG at 2004 written by me and Prof. Issa A.Issa.

Publications:

1. *Bhardwaj, Vinod Kumar, Pradhan, Anirudh, Ahmed, Nasr, and Shaker, A. A. (2022): eprint arXiv:2206.10113 (Cosmographic analysis of a closed bouncing universe with the varying cosmological constant in $f(R,T)$ Gravity).*
2. Samir, R. M, Takey, A. and **Shaker, A. A. (2020):** Astrophysics and Space Science 365 (8), 1-15 (The fundamental plane of brightest cluster galaxies and isolated elliptical galaxies).
3. Samir, R. M. and **Shaker, A. A.. (2021):** Applied Mathematics and Nonlinear Sciences, vol.0, no.0, 2021, pp. "Possible Relations between Brightest Central Galaxies and Their Host Galaxies Clusters and Groups" -. <https://doi.org/10.2478/amns.2021.1.00002>.

4. Samir, R. M., Reda F.M., **Shaker, A. A.**, Osman A.M.I. , and Amin, M.Y. (2016): *NRIAG Journal of Astronomy and Geophysics* 5 (2), 277-288. "The fundamental plane of early-type galaxies in different environments".
5. Fouad, A.M., Awad, Z., **Shaker, A. A.**, and Hayman, Z.M. (2019): *NRIAG Journal of Astronomy and Geophysics* 8 (1), 15-21. " Colour similarity study among small galaxy groups members".
6. Hendy, Y.H.M., Samir, R. M., **Shaker, A. A.**, and Ibrahim, Alhassan I. (2016): "Statistical study of warps in a sample of spiral and lenticular galaxies".
7. Nouh, M.I., Saad, A.S., Elsanhoury, W.H., **Shaker, A. A.**, Korany, B., and Kamel, T.M. (2016): *Astrophysics* 59 (4), 540-547. " White Dwarf Stars as Polytropic Gas Spheres".
8. Saad, A.S., Nouh, M.I., **Shaker, A. A.**, and Kamel, T.M. (2017): *Revista Mexicana de Astronomía y Astrofísica* 53, 247- 255. " Approximate Analytical Solutions to the Relativistic Isothermal Gas Spheres ".
9. Saad, A.S., Nouh, M.I., **Shaker, A. A.**, and Kamel, T.M. (2021): *Revista Mexicana de Astronomía y Astrofísica* 57, 407-418. " STABILITY ANALYSIS OF RELATIVISTIC POLYTROPES".
10. Azzam, Y., Nouh, M.I., and **Shaker, A. A.** (2020): *NRIAG Journal of Astronomy and Geophysics* 10 (1), 23-34. " Prediction of the atmospheric fundamental parameters from stellar spectra using artificial neural network".
11. Ahmed, N., Fekry, M., and **Shaker, A. A.** (2019): *NRIAG Journal of Astronomy and Geophysics* 8 (1), 198-203. " Transition from decelerating to accelerating universe with quadratic equation of state in $f(R,T)$ gravity".
12. Merluzzi, P.; Shaker, A. A.; Longo, G. (2000): *Mem. Societa Astronomica Italiana* 71, 1057 (Do Hickson compact groups of galaxies show FIR enhancement?).
13. Shaker, A. A.; Longo, G.; Richter, G. (2000): *Mem. Societa Astronomica Italiana* 71, 1061 (Frequency of interactions in compact groups of galaxies).
14. Merluzzi, P.;Shaker, A. A.; Longo, G. (2000): *Proceedings of IAU Colloquium* 174, Small Galaxy Groups Conf. 209 (FIR Infrared Emission as Indicator of Interaction in Hickson Compact Groups).
15. Shaker, A. A.; Longo, G.; Merluzzi, P. (1998): *Astron.Nachr.* 319, 167 (Early versus Late type galaxies in compact groups).
16. **Sabry A. Mohamed, Issa, A. Isaa, H. Abdel Rahman, and A.A. Shaker (2012):** *NRIAG Journal of Astronomy and Astrophysics, Series., "B"* (The Tree Clustering Technique and the Physical Reality of galaxy Groups).
17. Attia, Abdel-Fattah; Ismail, H. A.; Selim, I. M.; Osman, A. M.; Isaa, I. A.; Marie, M. A.; **Shaker, A. A.** (2006): *Chinese Journal of Astronomy & Astrophysics*, Vol. 5, p. 347-355 (Stellar Population Analysis of Galaxies based on Genetic Algorithms).
18. **Samir R. M ., Shaker A. A., Ismail H. A, Reda F. M ., Amin M. Y ., Osman A. M. I ., and Issa I. A . (2011):** *NRIAG Journal of Astronomy and Astrophysics, Special Issue* (SOME ENVIRONMENTAL EFFECTS ON THE PROPERTIES OF EARLY-TYPE BRIGHTEST CUSTER GALAXIES).
19. Samir R. M ., **Shaker A. A .**, Reda F. M ., Amin M. Y ., Osman A. M. I ., Issa I. A ., and Ismail H. A (2008): *NRIAG Journal of Astronomy and Astrophysics, Special Issue* (PROPERTIES OF EARLY - TYPE GALAXIES IN COMPACT GROUPS)
20. **Shaker, A.A.**, Selim, H.H., Ismail, H.A., Osman, A.M.I., Kamal, F. Y. , and Hendy, Y.H.M. (2004): *NRIAG Journal of Astronomy and Astrophysics*,

Special Issue, pp.181-187 (The Tully-Fisher relation for Hickson Compact Groups).

21. **SHAKER, A. A.**, ISMAIL, H. A., OSMAN, A.M.I., KAMAL, F. Y., and HENDY, Y.H.M. (2004): *Al-Azhar Buli. Sci. Vol. 15, No. 1, pp. 59* (ARE EARLY-TYPE GALAXIES IN COMPACT GROUPS IN THE BRIGHT FAMILY?).
22. Sharaf, M.A., Ismail, H.A., Selim, H.H., and **Shaker, A.A.** (2005): *Journal of Astronomical Society of Egypt* 13/I:1-13 (Statistical Magnitude Analysis and Distance Determination of The Globular Clusters in Milky Way Between $-3 \leq Z$ (kpc) ≤ 3).
23. Issa, I.A., Sharaf, M.A., Abdel-Sabour, M.A., Elkhateeb, M.M., and **Shaker, A.A.** (2002): The 37 th Annual Conference on statistics, Computer Science and operation Research, 14-17 Dec, 2002 (A new look to cepheids as a distance indicator).
24. **Morcos, A.B., and Shaker, A.A. (2010):** *NRIAG Journal of Astronomy and Astrophysics, Special Issue* (EGYPTIAN ZODIACS BETWEEN CLAIMS AND TRUTH).
25. **Shaker, A.A. , Ismail H. A ., and Haroon, A. (2010):** *NRIAG Journal of Astronomy and Astrophysics, Special Issue* (Some Scientific Work Done By The 74 inch Kottamia telescope).
26. **Shaker, A.A.** (2008): *NRIAG Journal of Astronomy and Astrophysics, Special Issue* (The Scientific Work Done By The 30 inch Reynolds Reflector At Helwan).
27. **Shaker, A.A.** (2004): *NRIAG Journal of Astronomy and Astrophysics, Special Issue, pp.171-179* (Spirals Peculiarities in Compact Groups of Galaxies).
28. Shears, Jeremy, and **Shaker, A.A.** (2015): *Journal of British Astronomical Association* 125 (no.2), p.80-93. "Harold Knox-Shaw and the Helwan Observatory".