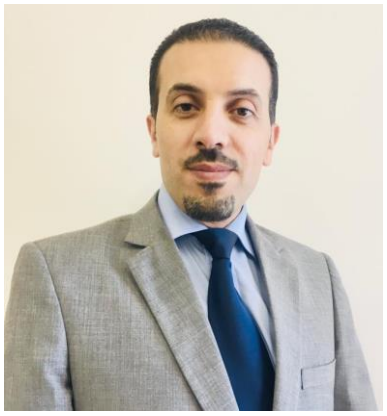

Curriculum Vitae

Dr. ALI A. TAANI

Associate Professor of astrophysics and scpace science

PERSONAL:

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- **Telephone No.:** Mobile : +962-77-2452593
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- **Email:** ali82taani@gmail.com ali.taani@bau.edu.jo
- **Fax No.:** +962-5-3530462

Current Address: Physics Department, Faculty of Science, Al -Balqa Applied University, Salt 19117, Jordan.

- **Date and Place of Birth**: 15/07/1982 – Irbid, Jordan.
- **Marital Status**: Married (two children).
- **Website** جامعة البلقاء التطبيقية
  http://www.bau.edu.jo/UserPortal/UserProfile/Wall.aspx?userid=96169
- **Research gate**: http://www.researchgate.net/profile/Ali_Taani2/
- **Google Scholar**: http://scholar.google.com/citations?user=eQB2E9IAAAAJ
- **Scopus** https://www.scopus.com/authid/detail.uri?authorId=36640600900
- **IAU** https://www.iau.org/administration/membership/individual/18724/
- **Academia** https://al-balqa.academia.edu/AliTaani
- **My ORCID ID:** https://orcid.org/0000-0002-1558-1472

EDUCATION:

Jan. 2010 – Feb. 2013: PhD in Physics with a major in Astrophysics and Space Science. National Astronomical Observatories (NAOC)-University of Chinese Academy of Sciences (UCAS), Beijing, **China**.

***Ranked*: 73** according to the-CWUR world University Rankings 2021.

101-125 according to the Times Higher Education World Reputation Rankings 2021.

Title of dissertation: Studying pulsar formation and evolution via the accretion induced collapse of white dwarfs.

Research Advisors: Prof. Chengmin **Zhang** and Prof. Yongheng **Zhao**.

- **Oct. 2004 – Jan. 2008: M.Sc. in Astronomy,** Institute of Astronomy and Space Science-Al al-Bayt University, **Jordan**.

Title of M.Sc. dissertation: Photometric (Optical) Variability of Some Close Binaries.

*Research Advisor***:** Dr. Hanna **Sabat.**

- **Oct. 2000 – June 2004: B.Sc.in Physics**, Al al-Bayt University, Jordan.

EMPLOYMENT AND EXPERIENCES:

- **Sep., 2022-Now: Head of Physics department**, Al-Balqa Applied University, **Jordan**.
- **Sep., 2022-Now: Head of Basic Science department**, Al-Balqa Applied University **Jordan**.
- **Sep., 2019-Now: Associate Professor**, Physics department, Al-Balqa Applied University, **Jordan**.
- **June 2018–Sep.2018: Visiting Scientist**, **CAS President's International Fellowship Initiative (PIFI)**: Institute of High Energy Physics. Beijing, **China**
- **July– Sept., 2017: Visiting Scientist**, National Astronomical Observatories, **China**.
- **Sept., 2016 – Sept., 2017: Assistant Professor**, Applied Science dept., BAU, Jordan.
- **Sept.2015–Sep. 2016:Visiting Academic**, Applied Physics and Astronomy dept., University of Sharjah, **United Arab Emirates**.
- **Sept. 15, 2014 – Sept. 1, 2015: Assistant Professor**, Dept. of Physics, BAU, Jordan.
- **May 15, 2014 – Sept. 15, 2014: Assistant Professor,** Applied Sciences dept, BAU, Jordan.
- **Sep. 15 2013–May 15 2014: Full-time Lecturer**, Applied Sciences dept. Aqaba University College, BAU, Jordan.
- **May 2013–Aug. 2013:Part-time lecturer**, Physics department,Yarmouk Uni., Jordan.
- **Nov. 2012 –Feb. 2013:**, **Researcher** NAOC, China.
- **Jan. 2010 - Nov. 2012: Research assistant**: NAOC, China.
- **Jan. 2010 - Nov. 2012: Research assistant**: UCAS, Beijing, China.

- **Sept. 2005 – Jan. 2010:** Teacher: Ministry of Education, Jordan.
- **Sept. 2006 – Jun. 2007:** Research Assistant, Instit.of Astron. Space Science, Al al- Bayt University, Jordan

AWARDS AND HONOURS:

1- **2021**, **Best Researcher Award in the International Scientist Awards on Engineering, Science, and Medicine**, Chennai, **India**.
2- **2018**, **Award for the Visiting Scientist**, Institute of High Energy Physics, Chinese Academy of Science, Beijing, **China**.
3- **2017**, **Research Excellence Award**, Al Balqa Applied University, **Jordan**.
4- **2015**, **Honoring for Visiting Academics**, University of Sharjah, **United Arab Emirates**.
5- **2014**, **Distinguished Speaker Award**: Jordan Astronomical Society**, Jordan**.

GENERAL RESEARCH INTERSETS:

- Astrophysics and space sciences
- Formation and evolution of binary stellar systems with compact objects.
- Single and binary star evolution.
- Normal and binary Millisecond Pulsars.
- X-ray binaries.
- The oldest stars in our Galaxy and the Universe by photometric and spectroscopic analysises.

COURSES TAUGHT:

- Astrophysics and Cosmology, Electromagnetism-2, Astronomy and Space Scinces, Modern Physics, Thermodynamics, Waves, Optics, Medical Physics, Graduation project, General Physics I & II (Phys. 101+102), General Physics for Computer Science students, General Physics for Medical college students, Physics (1+2) for Sea transportation technology students, Remedial Physics, General Physics lab I & II (Phys. 103+104).

Courses Ready to Teach:

- Atmospheric Physics, Meteorology, Solar physics, General Theory of Relativity, High Energy Astrophysics., Special Topics in Astrophysics and Space Science.

LANGUAGES:

- **Arabic**: Mother Tongue.
- **English**: Excellent spoken and writing.
- **Chinese:** Basics.

ADMINISTRATIVE EXPERIENCES and COMMITTEES MEMBERSHIPS:

- **Sep., 2022-Now:** Head of Physics department, Al-Balqa Applied University, Jordan.
- **Sep., 2022-Now:** Head of Basic Science department, Al-Balqa Applied University.

- **1/10/2018-1/09/2019:** Member in the University, BAU, Jordan.
- **1/10/2017-1/10/2018:** Member in the Faculty Council, BAU, Jordan.
- **1/10/2017- 1/09/2019:** Member in Scientifi Research Committee, Physics Dept. BAU.
- **1/10/2017- 1/09/2019**: Member in the Physics-Lab Committee, Physics Dept. BAU.
- **Sept. 1, 2015 – Aug. 31, 2016:** Member in the Scientifi Research Committee, Applied Physics and Astronomy departmernt, University of Sharjah, **United Arab Emirates.**
- **Sept. 2015–Aug. 2016:** Member in the Physics-Lab Committee, Applied Physics and Astronomy dept., University of Sharjah, **United Arab Emirates**.

THESES / GRADUATION PROJECTS SUPERVISION:

1) **Metal poor stars enhanced in R-process,** By phD candidate Ali Al-Shmary. Dept. of Physics/ **University of Sfax, Tunisai. 2022, Supervisor**.
2) **Tune Measutement in Bosster,** by Ghofran Al-Yazgeen ,Mohammad Al-Hajajeh and Jawad Al-bqwor, Physics Dept., BAU, **BS.c graduation project, Supervisor**. 2022
3) **Studying the non-destructive materials in cooperation with the Jordanian atomic energy commission systems,** by Rhagad Abu Radwan, Huda Abu-Sondus and Ghazi Yazgeen**, BS.c graduation project, Supervisor**. 2022.
4) **The Synchrotron Radiation Monitor in Booster**, by Najat AlAnati, Abdullah Abueid, Bushra Ghanem & Amin Alzubi, BAU, **BS.c graduation project, Supervisor**. 2021.
5) **Physical Parameters of the Visually Close Binary System HIP152 with Orbital Elements**. MS.c thesis by Anas Abu-Dhaim. Physics Dept., BAU. 2022, **Main Advisor**.
6) **Studying the eclipsing binary systems (V566 oph, V523 cas, RW com)** by Laith Marwan abu kaoud, Bahaa Khraisat and Shahd Alnserat, Physics Dept., BAU, **BS.c graduation project, Supervisor**. 2021
7) **An analysis of light curves for Binary Systems of Delta Orionis and V-453 Cygnus** by Etaf AL-Bsheish, Hadeel AL-Rajifi and Muath Abo Ballan, Physics Dept., BAU, **BS.c graduation project, Supervisor**. 2021.
8) **Studying the physical parameters of star spectra by of RSpec. software,** By Anas Abudhaim, Physics Department, BAU, **BS.c graduation project, Supervisor**. 2021
9) **Analyzing the spectrum of A-class stars** by Salsabil Manaseer, Noor Taha, Alaa Qudah, Physics Dept., BAU, **BS.c graduation project, Supervisor**. 2021.
10) **Metal-poor Stars Observed with the Automated Planet Finder Telescope. III. CEMP-no Stars are the Descendant of Population III Stars**, Astronomische Nachrichten, By Nour Aldein Almusleh. Al al-Bayt University, Jordan, 2021.
11) **Studying the Cyclotron lines in the High Mass X-ray Binaries**, by Mohamed Motlaq, **BS.c graduation project**, Physics Dept., BAU, 2020.
12) **Kind of Classisification for Normal and Millisecond pulsars,** by Areeg Yousef and Namaa Wishah, **BS.c graduation project,** Physics Dept., BAU, 2020.
13) **Double neutron star and their formation,** by Mohammad Al-Bqoor and Mohammad Al-sharay, **BS.c graduation project**, Physics Dept., BAU, 2020.
14) **Studying the Pulsars and their Parameters,** by Lina al-Shihan and Hadeel al Hamad, **BS.c graduation project**, Physics Dept, BAU, 2020.
15) **Normal pulsars and their formation**, by Zied Dadda, **BS.c graduation project**, BAU, 2019.

16) **Modified orbital elements of the two binary systems Hip 114375 and Hip 114576,** By Ali Al-Shmary. Dept. of Physics/Al al-Bayt University. 2019, **External examiner**.
17) **Physical Parameters of the Visually Close Binary System HIP12552 with Orbital Elements**. By Mohammad Hani El-mahameed. Department of Physics/Mu'tah University. 2014, **External examiner**.

SCHOLARSHPIS AND GRANTS:

1- **CAS President's International Fellowship Initiative (PIFI) 2018:** Chinese Academy of Science, Institute of High Energy Physics Research scholarship recipient. Beijing, **China 35,000 US $**.
2- **Grant from Abdul Hameed Shoman Foundation-Fund for Scientific Research Support**, 2019, **Jordan, 10,000 US $**.
3- **NAOC fellowship for visiting scientist**. Beijing, July– Sept. 2017**. China. 10,000 US $**.
4- Full grant from Al-Balqa Applied University for attending the Frontiers in Theoretical and Applied Physics. Sharjah. 22 – 25 Feb. 2017. **United Arab Emirates. 1,000 US $..**
5- Full grant from Internatinal Astronopmical Union for attending the 38th International School for Young Astronomers (ISYA), 21 Aug. – 8 Sep. 2016. **Iran, 1,000 US $**.
6- Full grant from University Jena for visiting researcher: Astrophysical Institute and University Observatory, University Jena, Jena, Aug. – 6 Sep. 2013, **Germany, 1,500 US $**.
7- Chinese Academy of Science, Research scholarship recipient (**CAS graduate fellowship; 3 years**). Beijing, Jan. 2010 - Jan. 2013**. China, 50,000 US $**.
8- National Astronomical Observatories, Research scholarship recipient (**NAOC graduate fellowship; 3 years**). Beijing, Jan. 2010 - Jan. 2013**. China, 20,000 US $**..
9- Grant from Yonsei university for attending the 5th Korea-Japan Young Astronomers Meeting, 22 - 25 Feb. 2012. **Korea**.
10- Grant from NAOC for attending the 5th Islamic Conference on Astronomy, 22 - 24 March 2011: **Jordan**.
11- Grant from Granada university and NAOC for attending the Azarquiel Summer School in Astrophysics, Granada university, Granada. 3 – 11 July 2010. **Spain**.
12- Grant from Institute of Astronomy and Space Science (**graduate fellowship; 1 year**), June 2006 – May 2007. **Jordan.**
13- Grant from Internatinal Astronopmical Union for attending the International School for Young Astronomers, **2 – 23 July 2004**. **Morocco**.

PARTICIPATION IN SCIENTIFIC MEETINGS/WORKSHOPS:

❖ Oral Presentations and Posters:

- **30 June – 1 July. 2022,** European Astronomical Society, (EAS Symposium 5) **Towards the next generation of X-ray surveys with Athena, Spain.**
- **23 – 27 May. 2022. The Multifaceted Universe: Theory and Observations, Russia.**
- **29 Nov. – 3 Dec. 2021. IAU Symposium 363**: Neutron Star Astrophysics at the Crossroads: Magnetars and the Multimessenger Revolution, Virtual, **Italy.**

- **8-12 Nov. 2021. IAU Symposium 362:** Predictive Power of Computational Astrophysics as a Discovery Tool, Vrtual, **France.**
- **1-5 Nov. 2021: IAU Symposium 366:** The Origin of Outflows in Evolved Stars: Virtual Meeting**, Belgium.**
- **23-26 March 2021.** Transient High Energy Sky and Early Universe Surveyor (**THESEUS conference),** European Space Agency (ESA), Vrtual, **Italy**.
- **15/4/2021,** Tunisia for Young Astronomers Association in Tunisia. Pulsars, The life after the death**. Tunsia.**
- **30/4/2021,** Intergalactic club and Theoretical Physics club in Egypt. Radio Astronomy, Earths eye to the Sky**. Eygpt.**
- 4-10, Oct. 2020, **World Space Week (WSW20),** Regional Centre for Space Science and Technology for Western Asia. Amman-JORDAN**.**
- 18-19, July 2020, **Binary and Multiple Stars: From Observations to Estimations,** Sharjah Academy for Astronomy, Space Science and Technology and Applied Physics and Astronomy departmernt, University of Sharjah, **United Arab Emirates.**
- 10-12 Sep. 2019, **The 1st Summer School 2019 in Astrophysics and Space Science,** Regional Centre for Space Science and Technology for Western Asia. Amman-**JORDAN.**
- 25-28 March 2019, **United Nations Jordan Workshop Global Partnership in Space Exploration and Innovation,** Regional Centre for Space Science and Technology for Western Asia. Amman-**JORDAN.**
- 26 Feb. 2019, **Physics Simenar :** Physics Department, Al-Balqa Applied.
- 22 Nov. 2018, **Jordan Astronomical Society. Jordan**
- 1-3 May 2018, **12th Arab Conference on Astronomy and Space Science;** RJGC **, Jordan**
- 27– 29 Apr.2017**:Humboldt Kolleg**, **Amman, Jordan.**
- 22– 25 Feb. 2017**: Frontiers in Theoretical and Applied Physics**. **United Arab Emirates**.
- 20 Aug.-10 Sep. 2016: **International Summer School for Young Astronomers** , **Iran**.
- 30July-7 August 2016:**41stCOSPAR Scientific Assembly**, Istanbul Congress Center **Turkey**.
- 2-10 August 2014 , **40th COSPAR Scientific Assembly**, Moscow**, Russia.**
- 16–19 June 2014:**The X-ray Universe 2014**, Trinity College Dublin, **Ireland**.
- 3 – 5 April 2014: **Humboldt College**, **Jordan**.
- 24-28 March 2014: S**tructure and Signals of Neutron Stars, from Birth to Death, Italy.**
- 18 – 20 March 2014: **6th Islamic astronomical conference:** Amman-**Jordan**.
- 26 – 28 Dec. 2012: **Shanghai Astronomical Observatory meeting,** Shanghai, **China**.
- 20-31Aug 2012: **28thGeneral Assembly of International Astronomical Union. China**.
- 14 - 22 July 2012: **39th COSPAR Scientific Assembly**, Mysore, **India**.
- 11 - 15 Oct. 2011: **3rd Galileo-XuGuangqi meeting.** NAOC, Beijing, **China**.
- 3 – 11 July 2010**:** Azarquiel Summer School in Astrophysics, Granada university, **Spain**.

❖ ***<u>Conferences/Workshops Attendance:</u>***

- 23-26 Aug. **IAU XXXI 2021General Assembly**
- 2- 5 May 2019: **4th Inter. Symposium on Dilectric material and Applications**, **Jordan**
- 9-12 Oct. 2018: **9th Inter. School of Physics(Fundamentals and Applications) Jordan**
- 7-11 Nov. 2017: **World Science Forum (Science for Peace)**, Dead-Sea, **Jordan**.

- 26-28 Sep. 2017: **Yarmouk University Scientific Research Symposium**, **Jordan.**
- 12-14Sep.2017:**1st Inter. Conf. on Geospatial Information Management, Jordan**
- 6-8Dec.2016:**2ed meeting for Arab Experts on Geographical Names,** RJGC**, Jordan.**
- 16May2016: **10thAnnual Scientific Research Forum**, University of Sharjah, **Emirates**.
- 30 - 31 Jan. 2012: **3nd Telescope Access Program Workshop,** NAOC**,** Beijing, **China**.
- 5 - 9 Nov. 2012: **Tsinghua Transient Workshop 2012**. Tsinghua University, **China**.
- 16-17 March 2012: **2nd Telescope Access Program Workshop,** NAOC**, China**.
- 9-11 May, 2011:**Pulsar Physics and the Application of Pulsars Timing**, **China**.
- 30 Aug. – 3 Sep. 2010: **MODEST-10** (Modeling Dense Stellar Clusters), **China**.
- 15 – 19 Aug. 2010: **General Relativity in Astrophysics**, Hebeh Normal Uni., **China**.
- 1 - 4 May 2010: **Astrophysics in Compact Systems**, Shan Dong University, **China**.
- 20–30Sep.2008:**2ed International Summer School for Young Astronomers, Armenia**.
- 27 July –1 Aug. 2008: **Summer School in High Energy Astrophysics**, Urbino, **Italy**.
- 05 – 15 Sep. 2006**: Summer School in Astronomy "Site Testing"**, Beirut-**Lebanon**.
- 16 – 18 Aug. 2006: **4th Islamic Conference on Astronomy,** Amman, **Jordan**.
- 15–17 Aug. 2005**: 7th Arab Conference Astronomy and Space Science**, **Jordan**.
- 8 June 2004:Observing historic **Transit of Venus**,Hamza Observatory Camp, **Jordan**.

❖ ***Media and Articles:***

The media plays a key role in transmitting scientific discoveries to the public, and all too often, misunderstandings and misconceptions are amplified. As a result, I have had a commitment and aim to explain these sciences (scientific method– the observation vs. theory approach) to the public in Arabic. This would sustain the young researchers from the Arab world in particular Jordan in astronomy-map and will contribute to a scientifically literate, since these fields are at the forefront of science and technology answering the fundamental questions and driving innovation in this world.
I did more than 60 TV and radio interviews (local and international) for (SkyNews, BBC, Al Hadath, AL Arabia, CGTN and AlMamlaka) handling many public topics in astronomy and space science.
More than 150 advertisements for physics, astrophysics and space science for PhD, MS.c, postgraduate and training programs have been posted on my Facebook page https://web.facebook.com/ali.taani.71

❖ **SCIENTIFIC ASSOCIATION AND COMMUNITY SERVICE**

- **Member of International Astronomical Union (IAU) -France**.
- **Associate Member of COSPAR, Australia.**
- **Member of Arab Union for Astronomy & Space Sciences** (AUASS), **Jordan**.
- **Member of Jordan Astronomical Society** (JAS), **Jordan**.
- **Member of Jordanian Physical Society (JPS), Jordan**.
- **Member of Jordanian Society for history of sciences , Jordan**.
- **External Reviewer, Astrophysical Journal (ApJ).**

- **External Reviewer, Jordan Journal of Physics (JJP).**
- **External Reviewer, Physics Letters *A* Journal.**
- **External Reviewer, Physics Letters *A* Natural Science (NS) Journal.**
- **External Reviewer, Natural Science (NS) Journal.**
- **External Reviewer, American Journal of Astronomy and Astrophysics (AJAA).**
- **External Reviewer, Journal of Physics.**
- **External Reviewer, Journal of Astronomy.**
- **Technical Program Committee member of 3rd Conf. on Astrophysics and Space Science (APSS 2017)**, China 2016.
- **Technical Program Committee member of 2ed Conf. on Astrophysics and Space Science (APSS 2016)** Thailand, 3-5 Jan., 2017.
- Local Organization Committee of **The Humboldt Kolleg Jordanian Life Sciences for Sustainable Development, 27– 29 Apr. 2017:**, Jordan.

PUBLICATIONS:

A. *Refereed Journals:*

- **2022**

1. Anas Abu-Dhaim, **Ali Taani**, Diala Tanineah, Nadeem Tamimi, Mohammad Mardini, and Mashhoor Al-Wardat, Studying the Physical Parameters of the Stellar Binary System Hip 42455 (HD 73900), **Acta Astronomica**, **ACCEPTED.**
2. **Ali Taani**, Shigeyuki Karino, Liming Song, Chengmin Zhang and Sylvain Chaty. Determination of wind-fed model parameters of neutron stars in high-mass X-ray binaries, **Publications of the Astronomical Society of Australia (PASA)**, ***39*, E040. doi:10.1017/pasa.2022.32**.
3. **Ali Taani**, Juan Vallejo and Mohammed Abu-Saleem. Assessing the complexity of orbital parameters after asymmetric kick in binary pulsars, **Journal of High Energy Astrophysics (JHEAP)**, 35, Pages 83-90.

- **2021**

4. M. Abu-Saleem and **A. Taani**. Geometric transformations on a topological black hole and their applications, **Chinese Journal of Physics**, 74, 53
5. Mashhoor Al-Wardat; Enas Abualrub; Hussein Abdallah; Mardini Mohammad; **Ali Taani**; Hatem Widyan; Zahra Yousef; Hamid Al-Naimiy; Nihad Yusuf. Physical and geometrical parameters of CVBS XIV: The two nearby systems HIP 19206 and HIP 84425, **Research in Astronomy and Astrophysics**, 21, 161
6. Nour Aldein Almusleh, **Ali Taani**, Sergen Ozdemir, Maria Rah, Mashhoor Al-Wardat, Mohammad K. Mardini and Gang Zhao. Metal-poor Stars Observed with the Automated Planet Finder Telescope. III. CEMP-no Stars are the Descendant of Population III Stars, **Astronomische Nachrichten** (AN), 342, 625.

7. MK Mardini, H Li, VM Placco, **A Taani**, L.H., Zhao G. VizieR Online Data Catalog: Metal-poor stars with APF. Obs. II. MW halo stars (Mardini+, 2019), VizieR Online Data Catalog 2021yCat..18820027M
8. Yamam Al-Tawalbeh, Abdallah Hussein, Fadi Suleiman, **Ali Taani**, Ahmad Abushattal, Mohammad Mardini, Nihad Yusuf, Mohammad Mardini, Hamid Al-Naimiy, Awni Khasawneh, Mashhoor Al-Wardat. Precise masses and orbital parameters of the binary systems HIP 11352, HIP 70973, and HIP 72479, **Astrophysical Bulletin**, 76, 71–83.
9. M. Abu-Saleem and **A. Taani**, Retraction and folding on the hyperbolic black holes, **AIP Advances**, 11, 015309.

- **2020**

10. Mohammad Mardini, Vinicius Placco, Yohai Meiron, Marina Ishchenko, Branislav Avramov, Matteo Mazzarini, Peter Berczik, Manuel Sedda, Timothy Beers, Anna Frebel, **Ali Taani**, Martina Donnari, Mashhoor Al-Wardat, and Gang Zhao. Cosmological Insights into the Early Accretion of r-Process-Enhanced stars. I. A Comprehensive Chemo-dynamical Analysis of LAMOST J1109+0754, **Astrophysical Journal**, 903, 88.
11. MK Mardini, H Li, VM Placco, S Alexeeva, D Carollo, **A Taani**, I Ablimit. VizieR Online Data Catalog: Metal-poor stars with APF. I. LAMOST CEMP stars (Mardini+, 2019), VizieR Online Data Catalog, J/ApJ/875/89. Originally published in: 2019, ApJ,875, 89M.
12. **Ali Taani**, Ahmad Abushattal, Awni Khasawneh, Nour Almousleh, Mashhoor Al-Wardat. Probability Distribution of Magnetic field strength through the Cyclotron Lines in High-Mass X-ray Binaries, **Jordan Journal of Physic** (JJP), 2020, 13, 243-251.

- **2019**

13. **Ali Taani**, Mohammad Mardini and Ahmad Abushattal, The regular dynamics through the finite-time Lyapunov exponent distributions in 3-D Hamiltonian systems, **Astronomische Nachrichten,** 340, 847-851
14. Mohammad Mardini, Vinicius Placco, **Ali Taani**, Haining Li and Gang Zhao. Metal-poor Stars Observed with the Automated Planet Finder Telescope. II. Chemodynamical Analysis of Six Low-Metallicity Stars in the Halo System of the Milky Way, **Astrophysical Journal**, 882, 27
15. Mohammad Mardini, Haining Li, Sofya Alexeeva, Vinicius Placco, Daniela Carollo, **Ali Taani**, Iminhaji Ablimit, Liang Wang, and Gang Zhao. Metal-poor stars observed with the automated planet finder telescop I. Discovery of five Carbon-enhanced metal-poor stars from LAMOST, **Astrophysical Journal**, 875, 89.
16. Shigeyuki KARINO, Kenji NAKAMURA and **Ali TAANI**, Stellar wind accretion and accretion disk formation: applications to neutron star high mass X-ray binaries, **Publications of the Astronomical Society of Japan**, Vol. 71, issue 3, P 1-12.
17. **Ali Taani**, Shigeyuki Karino, Liming Song, Mashhoor Al-Wardat, Awni Khasawneh and Mohammad Mardini, On the possibility of disk-fed formation in supergiant high-mass X-ray binaries, **Research in Astronomy and Astrophysics** , Vol. 19, issue, 1, 12

- **2017**

18. Yi-Yan Yang, Li Chen, Rong-Feng Linghu, Li-Yun Zhang and **Ali Taani,** Constraints on the estimation of the radius of double pulsar PSR J0737-3039A and its neutron star nuclear matter composition, **Chinese Physics Letters (CPL)**, 34, 129701.

19. Zhibin Dai, Paula Szkody, **Ali Taani**, Peter Garnavich and Mark Kennedy, Quiescent photometric modulations of two low-inclination cataclysmic variables KZGem and TWVir, **Astronomy and Astrophysics (A&A).** 606, 45
20. **Ali Taani** and Juan C. Vallejo, Dynamical Monte-Carlo simulation of 3-D galactic systems in axisymmetric and triaxial potentials, 2017, **Publications of the Astronomical Society of Australia (PASA)**), Vol. 34, 24 (doi:10.1017/pasa.2017.17).

- **2016**

21. **Ali Taani**, Systematic comparison of initial velocities for neutron stars in different models, 2016, **Research in Astronomy and Astrophysics (RAA),** 16,101.

- **2015**

22. **Ali Taani**, On the distribution of massive white dwarfs and it is implication to accretion induced collapse, **Jordan Journal of Physic (JJP)**, 8, 3, pp. 149-155.
23. **Ali Taani**, Monte-Carlo Simulation of Neutron Star Orbits in the Galaxy, **Publications of The Korean Astronomical Society**, vol. 30, pp. 583-584.

- **2014**

24. M. A. Al-Wardat, H Al-Naimiy, **A. Taani**, A Khasawneh, O. Al-Balawi, H. S. Widyan, Modified physical and geometric parameters of the eclipsing X-ray binary system Centaurus X-3, **Astrophysical Bulletin**, Vol. 69, No. 3, pp. 345–349.
25. M. A. Al-Wardat, Yuri Yu. Balega, Nihad A. Yusufand, Ali Taani, Kawther S. Al-Waqfi, Suhail Masday, Vladimir V. Leushion, Speckle Interferometric Binary System HD375; Is It a Sub-Giant Binary? **Astrophysical Bulletin**, Vol. 69, No. 1, pp. 62–71.

- **2013**

26. **Ali Taani**, Mashhoor Al-Wardat and Awni Khasawneh. Evolution of Accreting Binary Systems on the Spin-up Line, Australian Journal of Basic and Applied Sciences , 7(13): 287

- **2012**

27. **Ali Taani**, Luca Naso, Yingchun Wei, Chengmin Zhang and Yongheng Zhao, Modeling the Spatial Distribution of Neutron Stars in the Galaxy, 2012, Astrophysics and Space Science (ApS&S) Volume 341, Page 601-609, DOI 10.1007/s10509-012-1121-7.
28. **Ali Taani**, Chengmin Zhang, Mashhoor Al-Wardat andYongheng Zhao, Investigation of Some Physical Properties of Accretion Induce Collapse in Producing Millisecond Pulsars. 2012, Astrophysics and Space Science ApS&S, 340, 147, pp.147-153, DOI 10.1007/s10509-012-1023-8.
29. **Ali Taani**, Chengmin Zhang, and Mashhoor Al-Wardat Yongheng Zhao, Where do the Progenitors of Millisecond Pulsar come from? 2012, Astronomische Nachrichten (AN) 333, 1, pp.53-59. DOI 10.1002/asna.201111611

30. Yan Cai, **Ali Taani**, YongHeng.Zhao, and Chengmin Zhang, 2012, Statistics and Evolution of Pulsars'Parameters, Chinese Astronomy and Astrophysics 36, 137–147 DOI 10.1016/j.chinastron.2012.04.003**.**

- **2011**

31. Yan Cai, **Ali Taani**, Wei Wang, Yongheng Zhao and Chengmin Zhang, 2011, Statistics and Evolution of Pulsars' Parameters, Acta Astronomica Sinica, Vol. 52, pp. 449–459(in Chinese).
32. Yan Cai, **Ali Taani**, Wei Wang, YongHeng.Zhao, and Chengmin Zhang, 2011, Fermi Gamma-Ray Pulsars: Spectral and Generation Order Parameters, Chinese Physics Letters (CPL). 28, 9702. DOI 10.1088/0256-307X/28/8/089702.
33. C.M. Zhang, Y.Y. Pan, Y.H. Zhao, Y. Cai, J. Wang, Y.C. Wei, **Ali Taani**, and H.X. Yin.2011. Constrain Neutron Star Mass by the kHz QPO Frequency. International Journal of Modern Physics D, 20, 10. DOI 10.1142/S0218271811020135

- **2010**

34. Y.C. Wei, **A.Taani**, Y.Y. Pan, et al. Neutron Star Motion in the Disk Galaxy. 2010. Chinese Physics Letters (CPL). 27, 9801W. DOI 10.1088/0256-307X/27/11/119801

35. Y.-C. Wei, C.-M. Zhang, Y.-H. Zhao…., and **A. Taani**. The evolution of the z distribution of normal neutron stars in the Galaxy. 2010, Astronomische Nachrichten, 331, p.817-828. DOI 10.1002/asna.200911405**.**

B. ***Proceedings (Refereed conferences):***

- **2022**

1. **Ali Taani,** Accretion Induced Collapse of White Dwarfs as an Alternative Symbiotic Channel to Millisecond Pulsars**, The Multifaceted Universe: Theory and Observations - 2022 (MUTO2022), Proceedings Of Science (PoS).**

- **2021**

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