# AYNUR F. ABDULKARIMOVA

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## **EDUCATION**

2014- present	Azerbaijan national Academy of Sciences	Phd student in AstroPhysics
2009 - 2011	Baku State University	M.Sc. in Physics (Astrophysics)
2005-2009	Baku State University	B.Sc. in Physics (Physics and Astronomy)

## PROFESSIONAL EXPERIENCE

2011 – present	Shamakhy Astrophysical Observatory named after N.Tusi, Department Physics of stellar atmospheres and magnetism — Research Assistant	
2022-present	Khazar Univercsity — lecturer (Astronomy)	
2023-present	Department of Information Provision and Public Relations of Shamakhy Astrophysical Observatory — public information associate	



### MAIN OUALIFICATIONS

• Matlab, Maxim DL, Microsoft Office, Dech Software, Origin, Linux, İraf, CMFGEN, Idl Workspace, CMFGEN atmosphere code

#### **LANGUAGES**

• English, Russian

### **MEMBERSHIP**

Member of the European Astronomical Society 2014-2020

### FIELD OF RESEARCH

The field of research is the spectral and photometric investigation of close binary systems (CBS), the different stages of CBS, Wolf-Rayet (WR) type stars, the synthetic spectra of O and WR type stars, and the distribution of Wolf-Rayet type stars in the Galaxy.

### **PROJECTS AND GRANTS**

"Physics of Extremely Massive Stars"/ Marie Skłodowska-Curie grant project funded by the European Union Research and Innovation Program HORIZON 2020.

### **ARTICLES**

- 1. J.N. Rustamov, A.F. Abdulkarimova, <u>Interstellar lines Nal 5890(D₂) and Nal 5896 (D₁)</u> in the spectrum of Wolf-Rayet type star HD 192163, Astronomical Journal of Azerbaijan, Baku, 2012, Vol.7, №3, p.13
- 2. J.N. Rustamov, A.F. Abdulkarimova, <u>The asymmetry of interstellar lines of Nal 5890</u> and Nal 5896 in the spectrum of Wolf-Rayet type star HD 192163, Kinematics and Physics of Celestial Bodies, 2015, T.31, № 2, p.73
- 3. J. N. Rustamov, A.F. Abdulkarimova, Ha line in the spectrum of a spectroscopic binary star HD206267, Transactions of the National Academy of Sciences of Azerbaijan, Physics and Astronomy, 2016, XXXVI, №2, p.146



- 4. J. N. Rustamov, A.F. Abdulkarimova, <u>Spectroscopic investigation of HD 206267</u>. Journal of Astronomy of Azerbaijan, 2016, Vol.11, №3, p.10
- 5. J.N. Rustamov, A.F. Abdulkarimova, <u>Investigation of  $H_{\alpha}$  and  $H_{\beta}$  lines in the spectrum of HD 206267. Kinematics and Physics of Celestial bodies, 2017, T. 33, Nº 5, p.231</u>
- 6. J.N. Rustamov, A.F. Abdulkarimova, Variability of the spectral-binary HD 206267, Transactions of the National Academy of Sciences of Azerbaijan, Physics and Astronomy, 2017, XXXIII, № 2, p.190
- 7. J.N. Rustamov, A.F. Abdulkarimova, <u>The premilinary results of investigation of enigmatic star β Lyrae</u>, Astronomical Journal of Azerbaijan, 2020, Vol.15, №2, p.27
- 8. A.F. Abdulkarimova, O.V. Maryeva, S.V. Karpov, DISCOVERY OF A NEW [WR] STAR J040901, Odessa Astronomical Publications, 2022, vol. 35, p.10
- 9. J. N. Rustamov, A.F. Abdulkarimova <u>THE GALACTIC DISTRIBUTION OF WOLF-RAYET STARS</u>, Vol.18 No.1. 2023, p. 24

#### SCIENTIFIC VISITS

- European Week of Astronomy and Space Sciences, Athens, 4-8 July 2016, Wolf-Rayet type star HD191765 as possible evolutionary precursor of low mass X-ray binary systems – short talk
- Tartu Observatory 2019 Horizon2020. (27.03.2019-27.05.2019)
   The purpose of the visit: participating in the observations and obtaining reducing the observation materials with the IRAF (in Linux OS), participating at the scientific seminars and events.
- 3. <u>Ondrejov Observatory</u> Horizon2020. (01.05.2022-30.06.2022)

  Have continued previous topics. Prepared materials for articles and obtained



preliminary results for the selected objects at the end of the visit, which have presented at the seminar.

"Joint Journal Club" 19 may 2022 – discussion of selected articles,

### **SEMINARS**

- 1. "Elementary particles and the actual problems of the cosmology" Astronomy and Astrophysics club of Baku Engineering University April 3, 2018
- 2. "Academic hour" project of ASPU Student Youth Organization and Faculty of Physics and Technology April 16, 2018
- Tartu Observatory "Historical overview, current activities and perspectives" -May 8, 2019
- 4. Seminars for schools within the project of International Astronomical Union 100 hours Astronomy, 4-10 October, 2019 (Russian)
- 5. Seminars dedicated to <u>60th anniversary of World Aviation and Cosmonautics</u>
  <u>Day</u> April 9-12, 2021
- 6. "Summer camp" seminar "Human and Space" July 17, 2021
- 7. Women in Astronomy (with other colleagues) March 7, 2022
- 8. The Ministry of Youth and Sports & Young Scientists and Specialists of Azerbaijan National Academy of Sciences - "Youth innovation summer camp" - "The role of Astronomy in everyday life and the technologies used in other fields" August 12, 2022

<sup>&</sup>quot;Doors Open days" 20-21 may 2022 - volunteering