

Program

XV Bulgarian-Serbian Astronomical Conference

13 – 18 September
Varna, Bulgaria

13.09.2026 Sunday

14:00 - 15:00 - Arriving at the hotel and registration
15:00 - 17:00 - Visit of Euxinograde residence (optional)
18:00 - 19:00 - Welcome party

14.09.2026 Monday

9:00 - 9:30 - Registration
9:30 - Official opening of the conference

Session 1 - Chairman : Kamen Kozarev

9:45 - 10:05 - Milan S. Dimitrijević - Fifteen Bulgarian and Serbian Astronomical Conferences - **invited talk**
10:05 - 10:35 - Gordana Apostolovska - A Retrospective Analysis of CCD Photometry of Asteroids: A Quarter-Century at BNAO Rozhen and Nearly a Decade at AS Vidojevica - **invited talk**
10:35 - 11:00 - Goran Damljanovic - Results of SANU-BAN project Gaia astrometry and fast variable astronomical objects (2023-2025)

11:00 - 11:20 - Coffee break

Session 2 - Chairman : Svetla Tsvetkova

11:20 - 11:40 - Branislav Vukotić - Astronomical seeing and meteorological conditions at Astronomical Station Vidojevica
11:40 - 12:00 - Georgi Latev - The new ASA800RC telescope at Rozhen National Astronomical Observatory
12:00 - 12:20 - Zoran Simić - Urban Observatory of Belgrade (UrbObsBel): Study of Light Pollution in Serbia using the TESSW Night Sky Brightness Photometer
12:20 - 12:50 - Pencho Markishki - A rational method for studying the orientation of archaeoastronomical objects

12:50 - 14:00 - Lunch

Session 3 - Chairman : Milan S. Dimitrijević

14:00 - 14:30 - Ognyan Kounchev - Alternatives to the Neural Networks in the Physics Informed Neural Networks (PINNs) in some problems of Astrophysics
14:30 - 14:50 - Hristiyan Mihaylov - Column-density distribution in gravitationally coherent regions of star-forming clouds

14:50 - 15:10 - Orlin Stanchev - GLOBuFIT: From Stellar Density Points to Cluster Shape - An Interactive Workflow for Ellipse Fitting in Globular Clusters

15:10 - 15:30 - Coffee break

Session 4 - Chairman : Dragomir Marchev

15:30 - 15:50 - Borislav Spassov - Photometric Observations of Flickering of Mira with the NAO Rozhen 50/70-cm Schmidt Telescope

15:50 - 16:10 - Kiril Stoyanov - The peculiar X-ray binary 4U 2206+54

16:10 - 16:30 - Stefan Stefanov - TOI-2361 - a system of a Warm Jovian Exhibiting Transit Timing Variations Indicating a Nearby Companion, and Evidence for a Cold Jupiter from HARPS and FEROS

16:30 - 16:45 - Antoaneta Avramova-Boncheva - Photometric and Spectroscopic Investigation of Active G-, K-, and M-type Stars Using TESS and Ground-based Observations

18:30 - 19:15 - Poster session

1. Hristiyan Mihaylov - Modelling the evolution of density distribution in star-forming clouds as a Markov process
2. Krasimira Yankova - Active zones - connections with the disk structures
3. Rumen Shkevov - Inner heliosphere as a source of virtual relativistic particles fluxes
4. N. Zolnikova- Low relativistic electrons trapping regions near Cherenkov resonance
5. Desislava Stefanova - Spectropolarimetric Study of the Stellar Wind Bow Shock Nebulae around BD +43 4654 and HD 195592
6. Magdalena D. Christova - Stability of the Rozhen echelle spectrograph
7. Yanko Nikolov - Spectropolarimetric Observations with FoReRo2: Instrument Overview and Scientific Applications

19:15 - Dinner

15.09.2026 Tuesday

Session 5 - Chairman : Rumen Bachev

9:30 - 10:15 - Daniela Kirilova - Contemporary Cosmological Puzzles and their possible solutions - **plenary talk**

10:15 - 10:35 - Marko Grozdanović - The search for optical counterparts to isolated FASHI HI sources

10:35 - 11:00 - Nikolay Markov - Gravitational Potential as Cumulative Relativistic Interaction Delay: Evidence from Planets, Galaxies, and Galaxy Clusters

11:00 - 11:20 - Coffee break

Session 6 - Chairman : Gordana Apostolovska

11:20 - 11:50 - Elena Vchkova Bebekovska - Combining the Dense Ground-Based Photometry from NAO Rozhen and AS Vidojevica with Sparse Data for Asteroid Modeling - **invited talk**

11:50 - 12:10 - Tsvetan Tsvetkov - Cosmic Ray Variations Recorded by the MNM-ROZH Mini-Neutron Monitor Station

12:10 - 12:30 - Aleksandar Valjarević - Mapping Martian Dunes and Wind Patterns Using GIS and Satellite Data

12:30 - 13:30 - Lunch

Chairman : Zoran Simić

14:00 - 16:00 - Scientific discussion “The future of Balkan collaborations from technical and scientific point of view”

18:30 - 19:15 - Poster session

1. Nikola Petrov - Ground-Based Full-Disk Observations of the Solar Chromosphere in H α and CaIIK
2. Orlin Stanchev - The perimeter-area relation as a diagnostic of fractal dimension for dendrogram objects in molecular clouds
3. Aleksandar Jeliazkov - Physical properties of planetary nebulae
4. Miljana D. Jovanovic - Flux variability of AGNs important for the Gaia CRF and ICRF link
5. Zoran Simić - Selection available Trans-Iron Elements in White Dwarfs for calculation parameters of collisional broadening
6. Tsvetan G. Georgiev - Flickering of MWC 560 in 2011: Prominent quasi-periods of about 21, 40 and 50 minutes

19:15 - Dinner

16.09.2026 Wednesday

Session 7 - Chairman : Momchil Dechev

9:30 - 10:00 - Werner Pötzi - H-alpha observations at the Belogradchik observatory - **invited talk**

10:00 - 10:20 - Oleg Stepanyuk - AI-Based Segmentation of Solar Eruptive Phenomena and Space Weather Prediction: Recent Advances at the Solar Physics Group, IA NAO, BAS

10:20 - 10:40 - Galin Borisov - Investigation of the Colour Distribution in the Coma of the Disintegrating Comet C/2025K1 (ATLAS)

10:40 - 11:00 - Kamen Kozarev - Interferometric Radio Imaging and Modeling of Type II Solar Bursts

11:00 - 11:20 - Coffee break

Session 8 - Chairman : Goran Damjanovic

11:20 - 11:50 - Veselina Kalinova - Galaxy Evolution from Multi-wavelength Observations - **invited talk**

11:50 - 12:10 - Maria Petkova - Ellipticities of the Central Regions of Old Galactic Globular Clusters

12:10 - 12:30 - Nestor Arsenov - Investigating cosmic structure with quasars from Gaia and red galaxies from DESI LS

12:30 - 12:50 - Rumen Bachev - Blazars as the most extreme and violent multi-wavelength and multi-messenger sources in the Universe

12:50 - 14:00 - Lunch

Session 9 - Chairman : Magdalena Christova

14:00 - 14:20 - Milan S. Dimitrijević - Stark broadening data for N III spectral lines for white dwarfs and hot stars investigations

14:20 - 14:40 - Hristo Georgiev - Estimation of star's physical parameters, based on three-dimensional maps of the extinction in the Milky Way

14:40 - 15:00 - Lyubov Marinkova - On the Origin of Power-Law Tails of the Column-density Distribution in Galactic Star-forming Clouds

15:00 - 15:20 - Coffee break

Session 10 - Chairman : Veselina Kalinova

15:20 - 15:50 - Dejan Urošević - Cygnus loop: non-radiative and radiative filaments in optical and radio - **invited talk**

15:50 - 16:10 - Borislav Borisov - Exploring the Relationship Between Outburst Intervals in RS Ophiuchi

16:10 - 16:30 - Svetlana Boeva - Multicolor observations of V777 Peg in quiescence

18:30 - 19:15 - Poster session

1. Radoslav Zamanov - Spectral signatures of accretion flows
2. Daniela Boneva - Photometric variations and accretion processes of the EM UMa type dwarf novae IX Draconis
3. Magdalena D. Christova - Application of Stark broadening of Sn III spectral lines in astrophysics
4. Vinka Dakić- Temporal and spatial distribution of Galactic supernovae from supernova remnants statistics
5. Andon Kostov - Broadband monitoring of two comets
6. Samuil Petrov - Observations of the Sun from the Astronomical Center of the University of Shumen

19:15 - Dinner

17.09.2026 Thursday

Session 11 - Chairman : Lubomir Iliev

9:30 - 10:00 - Renada Konstantinova-Antova - On the global picture of stellar magnetism in single stars after the main sequence - **plenary talk**

10:00 - 10:20 - Svetla Tsvetkova - Magnetic field of FI Cnc

10:20 - 10:40 - Miroslav Moyseev - Disc properties of the gamma Cas analogue MWC 1023

10:40 - 11:00 - Asen Mutafov - New *BVRI* photometry of the young star GM Cep

11:00 - 11:20 - Coffee break

Session 12 - Chairman : Dejan Urošević

11:20 - 11:40 - Dragomir Marchev - Multicolor photometry of the cataclysmic variable SS Cyg
11:40 - 12:00 - Milica Andjelić - Distance determination to the Galactic supernova remnants
12:00 - 12:15 - Lubomir Iliev - Cyclic variations in the circumstellar environment of the Be/shell star 28 Tau (Pleione)
12:15 - 12:35 - Bojan Arbutina - Massive Contact Close Binary Systems and Their Stability
12:35 - 12:55 - Abolfazl Elsaghi - Binary Companions from SDSS DR17

12:55 - 13:30 - Lunch

13:30 - Excursion to Varna city

19:30 - Conference official dinner

18.09.2026 Friday

Session 13 - Chairman : Galin Borisov

9:30 - 9:50 - Emona Ilieva - Scientific Observations of the Total Solar Eclipse of 12 August 2026
9:50 - 10:10 - Milen Minev - Technical performance and first results of new 80cm telescope at Rozhen NAO
10:10 - 10:30 - Viktor Gerasimov - Re-aluminization of the Primary Mirror of the 2-m Telescope at Rozhen National Astronomical Observatory
10:30 - 10:50 - Vesna Mijatovic & Nenad Milovanović - Комплекс Астрономске опсерваторије у Београду као аутентична амбијентална целина: спој науке, културе и уметности
10:50 - 11:10 - Kamen N. Nedev - Astobiological Aspects of the Genetic Code Origin and Evolution

11:10 - 11:40 - Poster session

1. Antoniya Valcheva - Photometric study of luminous blue variables in IC3422
2. Aleksandar Ivanov - Study of possible hierarchical quadruple stellar system
3. Kaloyan Ivanov - Spectral analysis of ZTF J191814.28+010850.2
4. Daniela Kirilova - Chiral Tensor Particles in the Universe

11:40 - 11:50 - Official closing of the conference