



JOINT CONFERENCE OF THE SUB-REGIONAL EUROPEAN ASTRONOMICAL COMMITTEE (SREAC) AND THE BULGARIAN ASTRONOMICAL SOCIETY (BgAS)



http://www.astro.bas.bg/BAM2019/index.php



4 – 8 June 2019, Sofia, Bulgaria

Dedicated to the 100 anniversary of the International Astronomical Union and the 150 anniversary of the Bulgarian Academy of Sciences

PROGRAMME

June 4, Tuesday

Arival of the participants

19:30 – Welcome party

June 5, Wednesday

8:00 - 10:00 – Registration and coffee

Session 1: Stars 1 (Chair: E. Semkov)

10:00 – 10:20 - G. Đurašević - UU Cas-massive Close binary with accretion disk

 $\underline{10:20-10:40}$ - I. Stateva - The puzzling Algol-type star with oscillating component GSC 3889-0202

10:40 – 11:00 - K. Stoyanov - Spectral observations of High-mass X-ray binaries

 $\underline{11:00-11:20}$ - Y. Nikolov - Spectropolarimetric observation of Be/X-ray binaries X Per and MWC656

11:20 – 11:40 - N. Tomov – Hot wind in the symbiotic binary AG Peg during its 2015 outburst

11:40 - 12:00 - Poster presentations (5 minute each):

- 1. R. Pavlović What extent are double stars really binaries to?
- 2. Ts. Georgiev Intra-night flickering of RS Ophiuchi: III. Confirmation of the predicted 8.0, 5.3 and 3.5 min flickering modes
- 3. Ts. Georgiev -Intra-night flickering of RS Ophiuchi: IV. Shapes of the repeating structures and their evolution
 - 4. D.Boneva Disc's parameters and the accretion efficiency of two interacting binary stars

12:00 - 14:00 - Lunch

<u>14:00 – 14:30</u> – **Official opening**

Session 2: Observatories, Instruments and Cooperation (Chair: R.Konstantinova-Antova)

 $\underline{14:30-15:00}$ - E. Semkov - The National Astronomical Observatory Rozhen - current status and plans for upgrade - Invited talk

<u>15:00 – 15:30</u> - G. Damljanovic et al - Gaia DR2 and Serbian-Bulgarian investigations - Invited talk

15:30 - 15:50 Poster presentations (5 minute each):

- 1. G. Damljanovic Comparison of photometric results between the Serbian and Bulgarian telescopes and activities in line with Gaia Alerts (Gaia-FUN-TO)
 - 2. Z. Cvetković Measurement comparison between CCD frames obtained at NAOR and ASV
 - 3. G. Latev Bulgarian Serbian collaboration: Advantages of the simultaneous observations
 - 4. G. Latev CCD parameters evaluation using photon transfer analysis technique

15:50 – 16:20 – Coffee break

Session 3: Stars 2 (Chair: A. Antonova)

<u>16:20 – 16:40 - </u>A. Bókon - A stochastic sampling method for the analysis of eclipsed pulsations

 $\underline{16:40-17:00}$ - T. Mitnyan - Correlations between chromospheric activity and physical parameters of contact binary stars

17:00 - 17:20 - M. Krizek - Why is the proclaimed amount of dark matter overestimated?

June 6, Thursday

Session 4: Solar system and the Sun (Chair: G. Đurašević)

9:00-9:30 - G. Borisov - The diversity of the chemical composition of the Martian Trojan asteroids – Invited talk

9:30-9:50 - V. Celebonovic - Impact craters formation:some ideas

9:50 - 10:10 - B. Komitov – The solar cycles influence traces in Pinopsida-trees annual rings time series

10:10 - 10:25 - Poster presentations (5 minute each):

- 1. T. Boney Dust released by artificial cosmic impacts: observational and theoretical challenges
- 2. Sv. Boeva Light curve of 15691 Maslov asteroid
- 3. N. Petrov Research on the white-light solar corona and active solar processes during total solar eclipses

<u>10:25 – 11:00</u> – Coffee break

Session 5: Interstellar medium and Starforming regions (Chair: N. Markova)

 $\underline{11:00-11:20}$ - O. Stanchev - Comparative analysis of clump populations in Rosette MC extracted by the methods GAUSSCLUMPS and DENDROGRAMS

<u>11:20 – 11:40</u> - M. Bogdanova - A study of the hierarchical structure of MC Rosette based on observational and numerical data.

 $\underline{11:40-12:00}$ - L. Marinkova - On the extraction of power-law tails of the probability density functions in star-forming clouds

 $\underline{12:00-12:05}$ - Poster presentations (5 minute each):

1. L. Slavcheva-Mihova - Star Formation in Mrk 477

12:05 - 14:00 - Lunch

Session 6: Quasistellar Objects & Active Galatic Nuclei (Chair: T. Bonev)

 $\underline{14:00-14:20}$ - V. Bozhilov - Photopolarimetrical Study of Blazar-type AGN OJ287 with the 2m RCC Telescope at NAO Rozhen

<u>14:20 – 14:40</u> - M. Minev - Optical counterpart of gamma-ray observations of AGNs

 $\underline{14:40-15:00}$ - M. Jovanović - Quasiperiodicity of some of the quasars important to ICRF-Gaia CRF link

15:00 - 15:20 - P. Sándor - Lyman limit systems between z=1 and z=2

15:20 - 15:35 - Poster presentations (5 minute each):

- 1. B. Mihov The light curve analysis of the blazar 3C 454.3
- 2. G. Marković Morphology of some quasars suitable for the link between ICRF and future Gaia CRF
- 3. K. Yankova Advection– fundamental mechanism

15:35 - 16:00 - Coffee break

Session 7: Cosmology & Galaxies (Chair: I. Stateva)

16:00-16:20 - B. Nedelchev - Using The Properties of Kinematically Distinct Components as Fossil Records for Galaxy Formation and Evolution

<u>16:20 – 16:40</u> - D. Kirilova - Big Cosmological Influence of Tiny Lepton Asymmetry During BBN

19:30 - Conference dinner

June 7, Friday

Session 8: STARS 3 (Chair: I. Iliev)

9:00-9:20 - A. Valcheva - Variables in the field of M31 stellar complex OB81

9:20-9:50 - N. Markova - Low luminosity late O stars in the VFTS. Classification and main physical properties – Invited talk

9:50 - 10:10 - Z. Jäger - Supernova analysis with MCMC method.

10:10-10:30 - S. Georgiev - Magnetism in Cool Evolved Stars: the Single M-Giants EK Bootis and β Pegasi

<u>10:30 − 11:00</u> − Coffee break

Session 9: STARS 4 (Chair: O. Kuzmanovska)

<u>11:00 – 11:20</u> - A. Antonova - Spectral classification of ultracool dwarf candidates with OSIRIS/GTC. First detection of Balmer line emission from the dwarf carbon star LSR J2105+2514.

11:20 - 11:40 - Poster presentations (5 minute each):

- 1. L. Iliev Evidences for spectral variability of the stable shell star HD 192954
- 2. G. Latev Black body temperature vs. color indices: A grid constructed by data from Filter Profile Service at Spanish Virtual Observatory (SVO)
 - 3. L. Dankova Stellar maps of the Northern Sky
 - 4. N. Taneva The variable H42 in the M31 stellar complex OB81

Session 10: Education and Outreach (Chair: K. Stoyanov)

 $\underline{11:40-12:00}$ - O. Kuzmanovska - Astronomical alignments and calendars of the peak sanctuary Kokino

 $\underline{12:00-12:20}$ - E. Bozhurova - Astronomical problems for school olympiads based of moments of astronomy history

12:20 - 12:30 - Poster presentations (5 minute each):

- 1. I. Jokin Non-formal education in astronomy
- 2. L. Slavcheva-Mihova IAU 100 Year Celebration in Bulgaria

<u>12:30 – 12:45</u> - Closing

<u>12:45 – 14:30</u> – Lunch

<u>14:30 – 15:30</u> – SREAC Board Meeting

15:30 – BgAS Annual Meeting

June 8, Saturday

 $\underline{14:00-17:00}$ – Astronomy for the public

Excursion to Vitosha mountain/Sofia sightseeing