

18th SERBIAN ASTRONOMICAL CONFERENCE

16-20, October 2017, Belgrade, Serbia

Venue: *Serbian Academy of Sciences and Arts – SASA, Knez Mihailova 35, Belgrade*

Monday, October 16, 2017

16-17h The 130th anniversary of the Astronomical Observatory of Belgrade (Solemn Academy)

Place: Serbian Academy of Sciences and Arts - SASA Main Hall (2nd floor)

17-19h Welcome cocktail - SASA (1st floor - cafeteria)

Tuesday, October 17, 2017; place: Main Hall (2nd floor)		
<u>Chairs: L. Č. Popović</u>		<u>Opening and talks devoted to anniversaries</u>
8:00 – 9:00	Registration	
9:00 – 9:30	Opening ceremony	
9:30 – 10:00	Gojko Djurašević	Foundation of Astronomical Observatory in 1887 and role of Milan Nedeljković
10:00 – 10:30	Zoran Knežević	125 Years from the Birth of Academician V. Mišković
10:30 – 11:00	Coffee break	
<u>Chair: D. Urošević</u>		<u>Extragalactic astronomy and cosmology</u>
11:00 – 11:30	Stefano Bianchi	Challenges to the AGN Unified Model
11:30 – 12:00	Dragana Ilić	Spectroscopy and Spectropolarimetry of AGNA: from Observations to Modelling
12:00 – 12:30	Srdjan Samurović	Visible and Invisible Matter in Nearby Galaxies: Theory and Observations
12:30 – 12:50	Marko Stalevski	Peculiar Mid-Infrared Morphology of Active Galactic Nucleus in Circinus
13:00 – 15:00	Lunch time	

<u>Chair: Z. Knežević</u>		<u>125th anniversary of the birth of V. Mišković</u> <u>(Hall 2, 1st floor)</u>
15:00 – 15:30	Vojislava Protić - Benišek	Academician Vojislav V. Mišković (1892 - 1976): Life and Work of the Great Serbian Astronomer
15:30 – 15:50	Natalija Janc	Correspondence of Vojislav V. Mišković about his Doctorate with Milutin Milanković, Miodrag Ibrovac and Oton Kučera
15:50 – 16:10	Slobodan Ninković	Etudes de statistique stellaire - Mišković's thesis
16:10 – 16:30	Milica Čolaković Sanja Petrović	Vojislav Mišković's traces in the Library of the Serbian Academy of Sciences and Arts
16:30 – 17:00	Coffee break	
<u>Chair: G. Djurašević</u>		<u>History, philosophy and teaching of astronomy</u>
17:00 – 17:20	Veselka Trajkovska	Milan G. Nedeljković - the Founder and First Director of Astronomical Observatory in Belgrade
17:20 – 17:40	Milan S. Dimitrijević	Astronomical Work of Anatoly Anatolyevich Mihajlov (1941-2016)
17:40 – 18:00	Olga Atanacković	Astronomy Education in Serbia 2014-2017
18:00 – 18:15	Dušan Vukadinović	Department of Astronomy at Petnica Science Center: 2013-2017
18:15 – 18:30	Zoran Tomić	Project of Promotion of Astronomy Sky is the Limit

Wednesday, October 18, 2017 (Hall 2, first floor)

<u>Chair: S. Samurović</u>		<u>Stellar physics and physics of the interstellar medium</u>
9:30 – 10:00	John Raymond	Collisionless Shock Waves in the Solar Corona and Supernova Remnants
10:00 – 10:30	Dušan Onić	Emission nebulae: structure and evolution
10:30 – 11:00	Olivera Latković	Observational studies of close binary stars
11:00 – 11:20	Aleksandra Čiprijanović	Contribution of Galaxies and Galaxy Clusters to the Diffuse Gamma-Ray Background
11:20 – 11:50	Coffee break	
<u>Chair: O. Atanacković</u>		<u>Extragalactic astronomy and cosmology</u>
11:50 – 12:20	Debora Šijački	Cosmological simulations of structure formation: a critical view
12:20 – 12:40	Nemanja Martinović	Reconstructing Formation and Evolution of Compact Dwarf Candidates in Clusters of Galaxies
12:40 – 13:00	Majda Smole	Early Growth of Supermassive Black Holes and Gravitational Wave Recoil
13:00 – 13:20	Jelena Stanković	New cosmological solutions in Nonlocal Modified Gravity
13:20 – 15:00	Lunch time	
<u>Chair: M.S. Dimitrijević</u>		<u>Astrophysical spectroscopy and instruments</u>
15:00 – 15:20	Slobodan Jankov	Regulus observed with VLTI/AMBER
15:20 – 15:40	Ana Vudragović	Spectroscopical and Photometrical Analysis of Nearby Galaxies of Different Morphological Types
15:40 – 16:00	Vladimir Srećković	Radiative and Collisional Atomic/Molecular Data for Astrophysics
16:00 – 16:20	Oliver Vince	The First Year of the Milankovic telescope
16:20 – 16:50	Coffee break	
<u>Chair: N. Pejović</u>		<u>History, philosophy and teaching of astronomy</u>
16:50 – 17:10	Nataša Stanić	The Nature of Educational Activities in Planetarium and its Contribution to the Advancement of Astronomical Education

17:10 – 17:30	Sonja Vidojević	Astronomy Competitions and their Role in Astronomy Education in Serbia
17:30 – 17:50	Dragoslav Stoilković	Boscovich's Comprehension of Absolute and Relative Movement

Thursday, October 19 (Hall 2, first floor)		
<u>Chair: Z. Cvetković</u>		<u><i>Astrometry, dynamical astronomy, and planetology</i></u>
9:30 – 10:00	Dmitry Bisikalo	Gaseous envelopes of hot Jupiter
10:00 – 10:30	Rade Pavlović	Dynamics and Kinematics of Celestial Bodies and Systems
10:30 – 10:50	Viktor Radović	Excluding Interlopers from Asteroid Families
10:50 – 11:10	Ivana Milić-Žitnik	Impact of Yarkovsky Effect and Mean-Motion Resonances on Main Belt Asteroid's Transport
11:10 – 11:30	Coffee break	
<u>Chair: I. Vince</u>		<u><i>Stellar physics and physics of the interstellar medium</i></u>
11:30 – 12:00	Omar Tibolla	Cosmic Ray Origin: Beyond the Standard Model(s). The Case of Pulsar Wind Nebulae and Unidentified Very High Energy Gamma-Ray Sources
12:00 – 12:20	Tijana Prodanović	Cosmic-Ray Acceleration in Galactic and its Implications
12:20 – 12:40	Sladjana Knežević	Revealing Shock and Cosmic-Ray Properties from Balmer Emission in Supernova Remnants: the Case of Tycho
12:40 – 13:00	Milica Vučetić	Optical Supernova Remnants and their Influence on Star Formation Rates Derived from H α Emission
13:00 – 13:20	Jovana Petrović	Dissecting the Galactic TeV Excess
13:20 – 15:00	Lunch time	
<u>Chair: R. Pavlović</u>		<u><i>Astrometry, dynamical astronomy, and planetology</i></u>
15:00 – 15:20	Dušan Marčeta	Possibilities and Optimization of Landing on the Southern Hemisphere of Mars
15:20 – 15:40	Mihailo Martinović	A study of quasi-thermal noise and shot noise in space plasmas
15:40 – 16:00	Dejan Vujičić	The Application of Nine Degrees of Freedom Sensor in Determination of Telescope Position
16:00 – 16:20	Ištvan Vince	Illuminance and Visibility at Twilights
16:20 – 17:00	Coffee break	

<u>Chair: S. Jankov</u>		<u>Stellar and galactic systems</u>
17:00 – 17:30	Vesna Borka Jovanović	Tests of gravity at galactic and extragalactic scales: theory vs observations
17:30 – 17:50	Lazar Živadinović	Density Profile of the Milky Way: Comparison of Dynamical Model and Monte Carlo Method for Determining Stellar Space Densities
17:50 – 18:10	Stefania Gravina	Stellar kinematics around Galactic Center
18:10 – 18:30	Anna D'Addio	Testing extended theory of gravity by SgrA*
19:30	CONFERENCE DINNER	

Friday, October 20 (Hall 2, first floor)		
<u>Chair: A. Kovačević</u>		<u>Interdisciplinary studies (astrobiology, astrochemistry, geophysics, atmospheric physics, and space astronomy) and simulations</u>
10:00 – 10:30	Zuzana Kanuchova	Laboratory simulations of space weathering effects. Some applications
10:30 – 10:50	Vladimir Djošović	Probing the Galactic Habitability Time Scales
10:50 – 11:10	Stanislav Milošević	Influence of the Softening Length on Stability of Spiral Galaxies in N-Body Simulations
11:10 – 11:30	Ana Mitrašinović	Bar Detection in N-Body Simulations Using Fourier Analysis
11:30 – 12:00	Coffe Break	
<u>Chair: P. Jovanović</u>		<u>Gravitation and cosmology</u>
12:00 – 12:20	Žarko Mijajlović	Is Cosmological Constant Transient Phenomena?
12:20 – 12:40	Milan Milošević	Braneworld Cosmology and Tachyon Inflation - RSII Numerical Models
12:40 – 13:00	Ivan Dimitrijević	Cosmological Perturbations in Nonlocal Gravity
13:00 – 14:00	Assembly of the Serbian Astronomical Society	
14:30 –	Excursion	

Saturday, October 21 (place: Astronomical Observatory, Volgina 7)		
11:00 – 13:00	Milan Stojanović	Guided tour at Astronomical Observatory

Poster presentation will be during the whole Conference (poster panels are in the front of the Conference Hall 2)

List of Posters

P01: A. B. Nedeljković, NECESSITY OF RE-DEFINITION OF PLANET, AS PROPOSED BY ALAN STERN ET AL

P02: A. Ćiprijanović, T. Prodanović and M. Z. Pavlović, CONSTRAINING THE COLLECTIVE RADIO EMISSION OF LARGE SCALE ACCRETION SHOCKS

P03: A. Nina, V.M. Čadež, L.Č. Popović, V. A. Srećković, J. Bajčetić, S.T. Mitrović, M. Radovanović, M. Todorović Drakul, A. Kolarski and S. Simić, LOW IONOSPHERIC RESPONSE TO ASTRO-GEO-PHENOMENA

P04: A. Vudragović, O. Vince, S. Samurović and M. Jovanović, NEAR-INFRARED PHOTOMETRY OF THE NEARBY SPIRAL GALAXY NGC 2841

P05: A.I. Klyuyeva, A.V. Belov and E.A. Eroshenko, RIGIDITY SPECTRUM OF GALACTIC COSMIC RAYS VARIATIONS DURING THE FORBUSH EFFECTS

P06: B. Krstin, KORELACIJA ASTRONOMIJE I GEOGRAFIJE

P07: B. Novaković, V. Radović and V. Došović, ASTEROID FAMILIES PORTAL: AN ONLINE PLATFORM TO STUDY ASTEROID FAMILIES

P08: D.V. Lukić, PROTOCOL FOR ACTIVE SETI IN SOL NEIGHBORHOOD

P09: D.V. Lukić, SEARCH FOR POSSIBLE EXOMOONS WITH FAST TELESCOPE

P10: D.V. Lukić, CAN WE AFFORD AN INTERSTELLAR FLIGHT?

P11: G. Damljanović, S. Boeva, O. Vince, G. Latev, R. Bachev, M.D. Jovanović, Z. Cvetković and R. Pavlović, OBSERVATIONS OF GAIA-FUN-TO FROM 2014 USING SERBIAN AND BULGARIAN TELESCOPES

P12: Ž. Disterlo, RADIO ODJEK DELTA AURIGIDS U PERIODU 2006-2016 GODINE

P13: M. Stalevski, THE DUST COVERING FACTOR IN ACTIVE GALACTIC NUCLEI

P14: M.S. Dimitrijević, S. Sahal-Bréchet, N. Moreau, THE STARK-B DATABASE, A NODE OF VIRTUAL ATOMIC AND MOLECULAR DATA CENTER (VAMDC)

P15: A. Bajić and M.S. Dimitrijević, OVID, FASTI, SUN AND STARS

P16: M.S. Dimitrijević, ON THE ASTRONOMICAL SYMBOLS ON ROMAN REPUBLICAN AND IMPERIAL COINS

P17: M.D. Jovanović, G. Damljanović and O. Vince, R AND V BAND MONITORING OF QUASARS THAT ARE IMPORTANT FOR THE LINK BETWEEN ICRF AND THE FUTURE GAIA CELESTIAL REFERENCE FRAME

P18: N. Todorović, THE FINE STRUCTURE OF CHAOS IN THE SOLAR SYSTEM

P19: N. Martinović, M. Micic, A. Mitrašinović, M. Smole, S. Milošević, WHAT CAN ECCENTRICITIES OF MEMBERS OF CLUSTERS OF GALAXIES TELL US ABOUT CLUSTER EVOLUTION?

P20: N. Martinović, M. Micic, A. Mitrašinović, S. Milošević, M. Smole, DWARF GALAXY DEMOGRAPHY IN CLUSTERS OF GALAXIES FROM COSMOLOGICAL SIMULATIONS

P21: N.M. Sakan, V.A. Srećković, Z.Simić and M.S. Dimitrijević, THE SPECTRAL COEFFICIENTS OF ABSORPTION PROCESSES IN DENSE STRONGLY IONIZED ASTROPHYSICAL PLASMAS

P22: N.M. Sakan, V.A. Srećković, Z. Simić and M.S. Dimitrijević, THE OPTICAL CHARACTERISTICS OF DENSE, STRONGLY IONIZED HYDROGENE PLASMA, APPLICABLE IN ASTROPHYSICAL OBJECTS

P23: O. Vince, M. D. Jovanović, I. Vince and A. Janješ, FIRST SPECTRA FROM THE TELESCOPE MILANKOVIĆ

P24: S. Samurović, DYNAMICAL MODELS OF THREE LENTICULAR GALAXIES: NGC 1023, NGC 3115 and NGC 4526

P25: S. Samurović, G. Djurašević, Z. Cvetković, R. Pavlović and O. Vince, TELESCOPE "MILANKOVIĆ": MOUNTING, PRESENT AND FUTURE WORK

P26: M. Bílek and S. Samurović, TWO TYPES OF DARK MATTER DISTRIBUTION IN EARLY-TYPE GALAXIES

P27: S. Boeva, G. Latev, G. Nikolov, R. Zamanov, B. Spassov and M. Belcheva, FAST VARIABILITY OF GK PERSEI

P28: V. Čadež, ANALYSIS OF ELECTROMAGNETIC WAVES IN IONOSPHERIC PLASMA MODELS

P29: V. A. Srećković, Lj.M. Ignjatović, A. Nina and M. S. Dimitrijević, THE NEW MODEL METHOD OF THE ELECTROSTATIC SCREENING OF THE ASTROPHYSICAL PLASMAS: MULTI-COMPONENT SYSTEMS

P30: V. A. Srećković and D. M. Šulić, STRONG SOLAR X RAY FLARES: INFLUENCE ON THE IONOSPHERE

P31: V. Zeković, RESONANT MICROINSTABILITY AS A TRIGGER OF COLLISIONLESS SHOCK FORMATION

P32: R. Pavlović, Z. Cvetković, G. Damljanović, O. Vince and M. D. Jovanović, THE FIRST TEST OF NEW ANDOR IXON 897 EMCCD CAMERA

P33: Z. Prnjat, MILUTIN'S SUNDIAL IN KRALJEVO

P34: S. Ninković, ON A NEW FORMULA FOR THE VELOCITY-DISPERSION RATIO

P35: S. Ninković, ON A SIMPLE FORMULA FOR CALENDARS

P36: S. Čolaković and V. Protić-Benišek, STAR HERITAGE : PRESERVATION THE PARK AND VEGETATION WITHIN THE COMPLEX OF THE BELGRADE ASTRONOMICAL OBSERVATORY