

# **VI Serbian-Bulgarian Astronomical Conference (VI SBAC): 7-11 May 2008, Belgrade, Serbia**

Conference will be held in the building of Mathematical faculty in Jagićeva 5

## **PROGRAM OF THE CONFERENCE**

### **07. May Wednesday**

18:00-19:00 *Astronomy, Poetry and Art (Milcho Tsvetkov, Milan S. Dimitrijević, Zoran Simić, Andjelka Kovačević)*  
(Library of the Astronomical Observatory, Volgina 7)

### **19:00 Welcom cocktail**

(Library of the Astronomical Observatory, Volgina 7)

### **08. May Thursday**

#### **09:00-09:30 Opening ceremony**

##### **Chairman Milan S. Dimitrijević**

09:30-10:00 **Milcho Tsvetkov**, Wayne Osborn: Incorporation the world wide-field plate archives in the VO initiatives

10:00-10:30 **Predrag Jovanović**, Luka Č. Popović: Variations in an accretion disk emissivity – repercussions to the Fe K $\alpha$  line profile

10:30-11:00 **Georgi Ivanov**: Cepheid complexes of the Milky Way

#### **11:00-11:30 Coffee break**

## **Chairman Milcho Tsvetkov**

- 11:30-12:00 **Ljubinko Ignjatović**, Anatolij A. Mihajlov, Milan S. Dimitrijević, Vladimir Srećković: The n-n' mixing in stellar atmospheres
- 12:00-12:30 **Darko Jevremović**, Peter Hauschildt, Eddie Baron, France Allard, Anatolij A. Mihajlov, Ljubinko Ignjatović, Milan S. Dimitrijević: On the modelling of astrophysical spectra using PHOENIX
- 12:30-12:45 Mina Koleva, Philippe Prugniel, D. Michelsen, S. de Rijcke et al.: Stellar populations in dwarf elliptical galaxies
- 12:45-13:00 Petya Pavlova, Kostadinka Koleva: Technique for tracking and visualization of motion in sequence of images of the Sun's crown
- 13:00-13:15 Nataša Stanić: Preparations for the International Astronomical Year (2009) in Serbia

## **13:15—15:00 Break for the lunch**

## **Chairman Žarko Mijajlović**

- 15:00-15:15 Dragana Ilić, Alla I. Shapovalova, Luka Č. Popović, Alexander N. Burenkov, Vahram Chavushian: Variability of the emission line shapes of NGC 4151
- 15:15-15:30 Svetlana Boeva, Aleksandr Antov, Rumen Bachev, Tsvetan Georgiev: On the distance of KR Aurigae
- 15:30-15:45 Peter Duchlev, Joanna Kokotanekova, Kostadinka Koleva, Momchil Dechev, Paweł Rudawy, Bogdan Rompolt: Kinematics of the post-eruptive phase of an eruptive prominence on 8 May 1979
- 15:45-16:00 Kostadinka Koleva, Peter Duchlev, Momchil Dechev: H-alpha brightness evolution during the eruption of prominences of 7 May 1979 and 8 June 1980
- 16:00-16:15 Stojan Obradović, Slobodan Ninković: Metaphysical ideas in physical and astronomical theories
- 16:15-16:30 Milan S. Dimitrijević, Magdalena Christova, Zoran Simić, Sylvie Sahal-Bréchot: On the regularities of Stark broadening parameters within spectral series: Ar I lines

16:30-16:45 Žarko Mijajlović, Nadežda Pejović, Goran Damljanović, Dušan Ćirić: Envelopes of comet trajectories

## 09. May Friday

### 09:30 Excursion to the rests of the roman town Viminacium

## 10. May Saturday

### Chairman Luka Č. Popović

9:30-10:00 **Jan Vondrak:** Geophysical contributions in precession-nutation

10:00-10:30 **Andjelka Kovačević:** Some aspects of asteroid mass determination

10:30-11:00 **Georgi Petrov,** Momchil Dechev, Lyuba Slavcheva, Peter Duchlev, Boyko Mihov, V. Kopchev, Rumen Bachev: Astronomical virtual observatory; Bulgarian virtual observatory - place and role.

11:00-11:15 Katya Tsvetkova: Wide-field plate database and present exploitation of the archival plates

11:15-11:30 Katya Tsvetkova, Milcho Tsvetkov, Vojislava Protić-Benišek, Milan S. Dimitrijević: Bulgarian-Serbian collaboration in the astronomical wide-field plate archiving

### 11:30-12:00 Coffee break

### Chairwoman Katya Tsvetkova

12:00-12:30 **Vlado Milićević:** Milankovic's "the end of the world"

12:30-13:00 **Valeri Golev,** Nadia Kaltcheva, Evgeni Ovcharov, M. Kontizas: Massive cluster candidates in M33: a multitelescope view

13:00-13:15 Žarko Mijajlović, Aleksandar Valjarević, Nadežda Pejović, Aleksandar Simonović: Astroclimatic conditions on the mountain Vidojevica

13:15-13:30 Veljko A. Vujičić: The contribution to the theory of celestial mechanics - on the problems of two and three bodies.

### 13:30—15:00 Break for the lunch

## **Chairman Jan Vondrak**

- 15 :00-15 :15 Luka Č. Popović: Spectroscopical investigations of extragalactic objects at Astronomical Observatory (period 2006-2008).
- 15:15-15:30 Milan S. Dimitrijević: Investigations on Belgrade Observatory of the influence of collisional processes on astrophysical plasma spectra in 2006-2008.
- 15:30-15:45 Aytap Sezer: Optical imaging and spectroscopic observation of some galactic supernova remnants
- 15:45-16:00 Yavor Chapanov, Tsvetan Darakchiev: Latitude variations for the period 1987.5-2008.3 at observatory Plana and their interpretation
- 16:00-16:15 Jelena Kovačević, Luka Č. Popović, Milan S. Dimitrijević: The role of optical Fe II transitions from 4f, 6s and 4g energy levels in AGN spectra
- 16:15-16:30 Orlin Stanchev: Fundamental plane for dwarf and normal spiral galaxies"

**16:30-16:45 Coffee break**

**16:45-18:00 Poster session**

**20:00 CONFERENCE DINNER**

## **11. May Sunday**

### **Chairman Georgi Ivanov**

- 11:00-11:30 **Philippe Prugniel**, Luka Č. Popović et al.: Stellar populations in active galaxies
- 11:30-12:00 **Andrey N. Klyucharev**, Mikhail Yu Zakharov, A. A. Matveev, Anatolij A. Mihajlov, Ljubinko Ignjatović, Milan S. Dimitrijević : Chemiionization – Experiment, Theory, Cosmical perspective
- 12:00-12:30 **Dušan Ćirić**: Foundation of physics on topological spaces
- 12:30-12:45 Aleksandr Sergeev, Tatyana Sergeeva: The Golosiiv plate archive creation as an element of Ukrainian virtual observatory. First steps

12:45-13:00 Aleksandr Sergeev: New trends in Astrometry: Intelligent systems instead automatic measuring machines

## 13:00 Closing ceremony

### POSTER PAPERS

- Yu. K. Anan'evskaya, V. N. Frolov, Evgeni V. Polyakov, Milcho L. Tsvetkov: Processing and measuring of open cluster photo images with Pulkovo automatic machine „Fantasy“
- Vladimir Benišek: CCD photometry of asteroids from Belgrade Astronomical Observatory
- Rumen Bogdanovski, Renada Konstantinova-Antova: Photoelectric study of the flare activity of AD Leo
- Edi Bon, Nataša Gavrilović, Luka Č. Popović, Dragana Ilić: Modeling of AGN broad emission lines
- Edi Bon, Milan Ćirković: Coherent catastrophism through myth
- Ani Borisova, Damyan Kalaglarski, Milcho Tsvetkov: Archival photographic observations in the Pleiades Field: An on-line access to the Pleiades Plate Database and analysis of the plate data
- Zorica Cvetković, Rade Pavlović, A. Strigachev, Bojan Novaković: CCD measurements of double and multiple stars at NAO Rozhen
- Goran Damljanović, Nadežda Pejović: Classical observations of latitude and the improved reference frame
- Milan S. Dimitrijević, Zoran Simić, Andjelka Kovačević, Miodrag Dačić, Sylvie Sahal-Bréchot: Stark broadening of neutral Tellurium spectral lines in white dwarf atmospheres
- Gojko Djurašević, Istvan Vince, Olga Atanacković: Photometric study of RY Scuti
- Nataša Gavrilović: Modelling the stellar population in active galaxies
- Dragana Ilić, Dejan Urošević, Bojan Arbutina, Branislav Vukotić, Konstantin Stavrev: Observations of M81 galaxy group in narrow band SII and H $\alpha$  filters
- A Knebe, N. Draganova, C. Power, G. Yepes, Y. Hoffman, S. Gottlöber, B. Gibson: On the relation between radial alignment of dark matter subhalos and host mass in cosmological simulations
- N. Koleva, Todor Veltchev, Petko Nedialkov, Blue-to-red stars ratio in stellar complexes and associations in M33 galaxy

- M. Kontizas, Grigor Nikolov, A. Dapergolas, E. Kontizas, Valery Golev, I. Bellas-Velidis: The distortions in density profiles of star clusters of the Magellanic Clouds and their relation to their structural parameters.
- Vladimir V. Mikhalkuk: Influence of the phase of the spherical planet on the position of its photocenter"
- Slobodan Ninković, Aleksandar Valjarević: Treating surface brightness profiles in the fields of globular clusters
- Evgeni Ovcharov, Antonia Valcheva, V. Ivanov, Petko Nedialkov, Tsvetan Georgiev, Ivaylo Stanev: Long-term optical monitoring of the quasar FBQSJ0754+3033
- Nadežda Pejović, Aleksandar Valjarević, Žarko Mijajlović, Dušan Ćirić: Astronomy in the Toplica region
- D. Petkova, Petko Nedialkov, Vladimir Shkodrov: The physical characteristics of stars harboring planets
- Georgi Petrov: Bulgarian virtual observatory. Multicolor observations of Box /Peanut galaxies
- Georgi Petrov, V. Kopchev: Bulgarian virtual observatory; Multicolor observations of open clusters in our Galaxy
- Georgi Petrov, Ivanka Yankulova, Valery Golev: Unabsorbed Sy2 Galaxies with and without hidden AGN source
- Saša Simić, Luka Č. Popović: Influence of barrier form on the shape of the GRB light curve pulses
- Zoran Simić, Milan S. Dimitrijević, Andjelka Kovačević, Miodrag Dačić: On the Stark broadening of Cr II  $3d^5 - 3d^4 p$  spectral lines in hot star spectra
- Luba Slavcheva-Mihova, Boyko Mihov: A search for new structural components in Seyfert galaxies
- Luba Slavcheva-Mihova, Bojko Mihov, Georgi Petrov, Michel Dennefeld: Active galactic nuclei: relations between nuclear activity, star formation and bulge masses.
- Stevo Šegan, Dušan Marčeta: Ephemeris calculations concepts: Conventions and practice in the planet's physical ephemerides calculations
- Stevo Šegan, Sonja Vidojević: General algorithm for the data processing: Phase I: Acquisition, preprocessing and correlation analysis; Phase II: Statistical dependences and regression analysis
- Aleksandar S. Tomić: Direct determination of Solar physical coordinates  $B_0, P$  from photoheliograms
- Katya Tsvetkova, Milcho Tsvetkov, Tatyana Sergeeva, Alexandr Sergeev: Wide-Field Plate Database: Included Ukrainian Plate Catalogues

Antonia Valcheva, Evgeni Ovcharov, Petko Nedialkov, Tsvetan Georgiev, A. Kostov, Y. Nikolov: A Search for Novae in M31 with the telescopes of NAO Rozhen

Luba Vassileva, Petko Nedialkov, Todor Veltchev: Young stellar groups in M33 galaxy: delineation and main parameters

Todor Veltchev, R. S. Klessen, P. Clark: Toward a model of the stellar initial mass function (IMF) from density distribution of molecular cloud clumps.

Krasimira Yankova: Stability and evolution of magnetic accretion disk