# 6<sup>TH</sup> SREAC MEETING

## THE SECOND ANNOUNCEMENT

On behalf of the Sub-Regional European Astronomical Committee (SREAC) and the Astronomical Observatory of Belgrade (Serbia), you are cordially invited to take part in the 6<sup>th</sup> SREAC Meeting and the joined scientific meeting "ASTROPHYSICS AND ASTRODYNAMICS IN BALKAN COUNTRIES IN THE INTERNATIONAL YEAR OF ASTRONOMY", to be held in Belgrade, Serbia, from September 28<sup>th</sup> to 30<sup>th</sup>, 2009. The topics of the meeting are primarily the astrophysics and astrodynamics of the solar system bodies, stars and galaxies.

The Sub-Regional European Astronomical Committee was established within the framework of the "Enhancing astronomical research and observation in South-East Europe and Ukraine" project of the UNESCO Regional Bureau for Science and Culture in Europe (UNESCO-BRESCE). From the Statute of the Sub-regional European Astronomical Committee: "The main objective of SREAC is to elaborate and implement a sub-regional strategy for the development of astronomy in South-East Europe and Ukraine and to strengthen astronomical co-operation in the sub-region, and between the region and countries outside." This is also the most important aim of the Meeting in September.

We welcome you to Belgrade, and look forward to your participation in the meeting and contributions to the development of astronomy in South-East Europe!

The scientific organizing committee

## **CONFERENCE TOPICS & INVITED LECTURES**

#### Astrodynamics

Christos Efthymiopoulos: Invariant manifolds and chaotic spiral arms in galaxies

#### **Galaxies and Cosmology**

*Daniela Kirilova*: Neutrino in Cosmology *Milan Ćirković*: The Galactic habitable zone and Fermi's Paradox

### Stellar & Solar Physics

Osman Demircan: Stellar rotation: theory and observation Cristiana Dumitrache: Filaments evolution Ilian Iliev: Surface mapping and tomography: new gems for the crown of stellar spectroscopy Nevena Markova: Quantitative spectroscopy of OB stars: Theory and Observations Eleni Rovithis-Livaniou: Latest news from the field of exoplanets

## PRELIMINARY CONFERENCE PROGRAM

#### MONDAY, SEPTEMBER 28

- 08:00 Registration
- 09:00 Opening

#### Section 1: Astrodynamics

- 09:30 *Efthymiopoulos*: Invariant manifolds and chaotic spiral arms in galaxies
- 10:00 *Mioc*: Equilibria of Seeliger's problem. Analytic approach
- 10:20 Ninković: Binary 15 Mon and star cluster NGC 2264
- 10:40 Coffee break
- 11:10 *Mickaelian*: Proper motion analysis and discovery of new white dwarfs and subdwarfs among the FBS and SBS blue stellar objects
- 11:30 *Damljanović*: A better reference frame by using improved proper motions of single and double stars
- 11:50 *Pashkevich*: On the geodetic rotation of the major planets, Pluto, the Moon and the Sun
- 12:10 Borisov: Variation of heliocentric coordinates of asteroid 108 Hecuba
- 12:30 Lunch

#### Section 2: Galaxies & Cosmology

- 14:30 Kirilova: Neutrino in cosmology
- 15:00 *Hafizi*: A review on temporal lag estimation in GRBs
- 15:20 Lalović: Measurement of velocity dispersions of nearby galaxies

- 15:40 *Vince*: Dust attenuation of starburst galaxies
- 16:00 Coffee break
- 16:30 *Ćirković*: The galactic habitable zone and Fermi's paradox
- 17:00 Vukotić: Cellular automation of GHZ
- 17:20 Golev: Homogeneous UBVRI photometry of the cluster candidates in M33
- 17:40 Samurović: The problem of stellar anisotropies in nearby galaxies

#### **TUESDAY, SEPTEMBER 29**

Poster session: from 12:00 to 16:00

#### Section 3: Stellar & Solar Physics

- 09:00 Rovithis-Livaniou: Latest news from the field of exoplanets
- 09:30 Voloshina: Photometric study of selected SU UMa-type dwarf novae
- 09:50 *Borkovits*: Interferometric observations of the hierarchical triple system Algol
- 10:10 Markov: Spectroscopic observations of UU Cas: preliminary results
- 10:30 Coffee break
- 11:00 *Iliev*: Challenges of Modern Astrophysics: Doppler Imaging and Doppler Tomography
- 11:30 Biró: Nonradial pulsations in eclipsing binaries: methods of mode identification
- 11:50 *Antonova*: Investigating magnetic field strengths and topologies for pulsing ultracool dwarfs
- 12:10 *Čadež*: Instabilities in stratified magnetized stellar atmospheres
- 12:30 Lunch
- 14:00 SREAC Meeting

#### Section 4: Amateur Astronomers Meeting

20:00 Conference dinner

#### WEDNESDAY, SEPTEMBER 30

#### Section 3: Stellar & Solar Physics

- 09:00 *Dumitrache*: Filaments evolution
- 09:30 *Dumitru*: A case of filament active region interaction
- 09:50 *Jovanović*: A new calibration method for water vapor blending of solar lines
- 10:10 *Goker*: Slow shocks in a current sheet with multi-fluid plasma
- 10:30 *Mioc*: Coronal mass ejections: a different mathematical approach
- 10:50 Coffee break
- 11:10 Demircan: Stellar rotation: theory and observation
- 11:40 *Kuzmanovska-Barandovska*: Iteration factors method for multilevel radiative transfer: convergence properties
- 12:00 Konstantinova-Antova: Are the M giants magnetically active?
- 12:20 *Zboril*: Stars suspicious of bright spots

- 12:40 *Ekmekçi*: Summarizing the results of photometric analyses of long-term BV observations of UX Arietis
- 13:00 Lunch
- 14:50 *Markova*: Quantitative spectroscopy of OB stars: theory and observations
- 15:20 *Antonopoulou*: V1038 Her and V1051 Her: BVRI photometry, color indices estimation and modeling
- 15:40 *Goker*: An examination of x-ray binaries in Hertzsprung-Russell diagram
- 16:00 Akkaya: CCD UBVRI photometry of the galactic open clusters: Be89, Ru135 and Be10
- 16:20 *Tsantilas*: Inversed semi-detached binaries (ISDB)
- 16:40 Coffee break
- 17:00 *Bonev*: Recent upgrades of the 2-meter telescope at NAO Rozhen
- 17:20 *Dennefeld*: Observing facilities in Europe, for research and teaching
- 17:50 Closing

Please, plan your talk according to these recommendations:

Invited talk: 30 minutes (25 + 5 for discussion) Contributed talk: 20 minutes (15 + 5 for discussion) Poster talks (if the final schedule allows): 2 to 5 minutes

Note that this program is preliminary and might change.

## SOCIAL PROGRAM

A conference dinner will be organized on Tuesday, September 29; the details are still pending, but we expect that the price for one person will be around  $30 \in$ .

# SCIENTIFIC ORGANIZING COMMITTEE

- CHAIR: Ištvan Vince (ivince@aob.bg.ac.yu) Astronomical Observatory Belgrade, Serbia
- Gordana Apostolovska (gordanaa@on.net.mk) Faculty of Natural Sciences, Institute of Physics, Macedonia
- Tanyu Bonev (tbonev@astro.bas.bg) Institute of Astronomy at the Bulgarian Academy of Sciences, Bulgaria
- Osman Demircan (demircan@comu.edu.tr) Canakkale University, Turkey
- Zoran Knežević (zoran@aob.bg.ac.yu) Astronomical Observatory Belgrade, Serbia
- Vasile Mioc (vasile\_mioc@yahoo.com) Astronomical Institute of the Romanian Academy, Romania
- Eleni Rovithis-Livaniou (elivan@phys.uoa.gr) Athens University, Greece

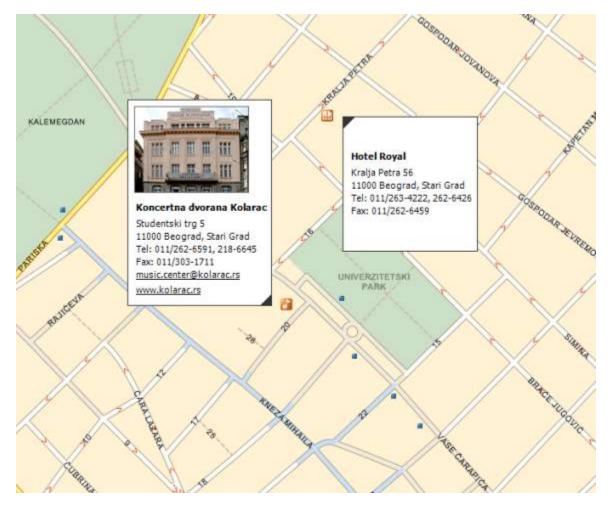
# LOCAL ORGANIZING COMMITTEE

- CHAIR: Rade Pavlović (rpavlovic@aob.bg.ac.yu)
- Nikola Božić (bozicn@gmail.com)
- Attila Cséki (attila@aob.bg.ac.yu)
- Ana Lalović (alalovic@aob.bg.ac.yu)
- Olivera Latković (olatkovic@aob.bg.ac.yu)
- Bojan Novaković (bnovakovic@aob.bg.ac.yu)

## VENUE, ACCOMMODATION AND WEATHER

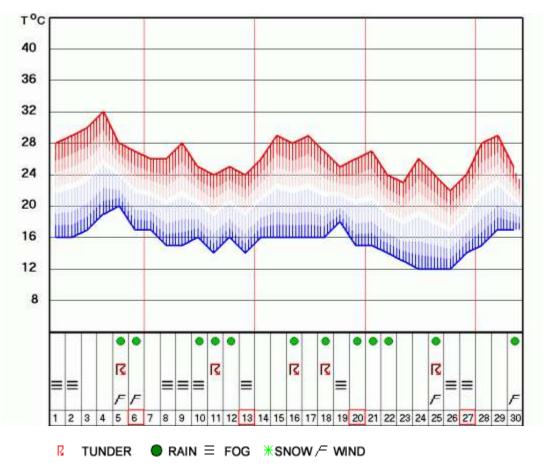
The conference will take place in Belgrade, Republic of Serbia, in *Ilija*. *M Kolarac Foundation*, which is located in the very center of the city.

Participants who requested financial support for accommodation in Belgrade during the conference will be accommodated in *Hotel Royal*, also located in the center of the city and very close to the conference venue.



If you have applied for the accommodation grant and haven't received a notification about it, or if you need help finding other accommodation, please contact the LOC as soon as possible.

The long-term weather forecast for the end of September predicts warm and mostly dry weather during the conference, with daily temperatures ranging from 20°C to 25°C and nightly temperatures in the range from 12°C to 16°C.



# REGISTRATION

The registration is closed.

Registered participants are kindly asked to study the list of participates and the list of abstracts on the website of the conference, www.aob.bg.ac.yu/sreac, and report any mistakes or omissions to the LOC as soon as possible.

# CONTACT

POSTAL ADDRESS:

Astronomical Observatory Belgrade Volgina 7, 11160 Belgrade Serbia

PHONES:

Rade Pavlović (Chair of LOC): +381 11 3089 075 Ištvan Vince (Chair of SOC): +381 11 3089 072

FAX: +381 11 2419 553

CONFERENCE WEBSITE: www.aob.bg.ac.yu/sreac

CONFERENCE E-MAIL: sreac@aob.bg.ac.yu