The International Year of Astronomy in Serbia

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Abstract
The central institution in Serbia involved in the preparations for the International Year of Astronomy 2009 (IYA2009) is the Astronomical Society “Rudjer Boskovic” (ASRB) Belgrade, the oldest astronomical society in Serbia and one of the oldest in the Balkans (founded in 1934). ASRB has published the astronomical magazine VASIONA (Universe) since 1953. This is the oldest magazine in Serbia for the popularisation of astronomy and science in general. The most important activities in the ASRB public outreach programme are based on ongoing programmes and projects at the Public Observatory (founded in 1964) and the Planetarium (founded in 1969). The National Node has been working on a detailed plan to enrich ongoing projects and organise special IYA2009 events (public observations and lectures, 100 hours of astronomy, special TV shows and broadcasting programmes, concerts and exhibitions) all over the country, coordinating more than 20 amateur astronomical societies. It also should be noticed that in 2009, the year of celebrating astronomy, the Astronomical Society “Rudjer Boskovic” celebrates three important anniversaries – 75 years since its foundation, 45 years of the Public Observatory and 40 years of the Planetarium.

Ongoing projects and IYA2009 preparation at the Public Observatory and the Planetarium
The Public Observatory and the Planetarium are situated in the Kalemegdan Fortress (built in the XIV-XVth century), surrounded by a beautiful park in Belgrade, on the top of the hill near the confluence of the Sava and the Danube. Over the past four decades these two institutions – unique for Serbia and in the region of the Former Yugoslavia – have been visited by more than 2 million people. Nowadays the ASRB still has about 30,000-40,000 visitors per year, although no longer so many as in the time of the former Yugoslavia with its six united republics.

Astronomical programmes and projects at the ASRB have been developed over the last 40 years and have significantly improved in last three years. The number of employees – four – has not changed since the beginning of the ASRB. In order to develop public outreach at the ASRB, a new organisational structure has been developed that includes at least 12 employees, including a technical staff, a marketing department, an educational department, an observational department and an administration.

1 http://www.adrb.org
2 http://www.beogradska.tvrdjava.co.yu; http://razgledanje.tripod.com/tvrdjava
1. **Public Astronomy Classes** – Open Astronomy Course: 22 lectures free of charge and open to the public in semi-annual cycles, starting in March and September. Standard lectures: The sky above our head, Constellations, Time zones and the astronomical definition of the day and year, the Earth and Moon, Earthlike planets, Giant planets, Satellites of giant planets, Asteroids and comets, the Kuiper belt beyond Neptune and the Comet cloud (Oort Cloud), the evolution of the Solar System, Extrasolar planets, the Sun, Stars, Evolution of small stars, Evolution of massive stars – black holes and neutron stars, Milky way components, Dark matter in the Milky Way, Classification of galaxies and active galactic nuclei, Galaxy clusters and the large scale structure of the Universe, the Evolution of the Universe, Cosmological theories, Extraterrestrial life. The average number of visitors per lecture is 60-80. This programme will be a part of the IYA2009 Cornerstone Project, the *Portal to the Universe*.

2. **Planetarium projections.** Standard planetarium projections for schoolchildren, students and general public have been improved with additional PowerPoint presentations that tell short stories about the Universe and its evolution.

3. **Belgrade Astronomical Weekend.** This is a 25 year old event that attracts all amateur astronomers (and amateur astronomical societies) from Serbia. Usually, six to ten public lectures (by invited speakers, eminent astronomers) about the hottest astronomical topics (new discoveries and theories) are given every year at the Planetarium during the last weekend in June. In the evening after the lectures public observations are organised at the Public Observatory, or an observational expedition far from the city lights can be undertaken. This event will easily become a part of the IYA2009 Cornerstone Project, *100 hours of astronomy*.

4. **Summer astronomical meeting.** This event is more than ten years old. Each year some specific widely discussed astronomical topics are chosen and five special lectures are given about the topics. The lectures are usually held in the Planetarium on Friday evenings at the end of August. The summer meeting in 2007 discussed extraterrestrial life (communications, UFO problems and related philosophical and religious problems). This programme will be a part of the IYA2009 Cornerstone Project *Cosmic Diary*.

5. **Summer School of Astronomy.** The Summer School began in 2002 and is now one of the most popular ASRB programmes for the younger generation. The School lasts for 7-8 days at a selected Serbian mountain site and consists of a theoretical part (30-35 lectures given by young ASRB associates) during the day and practical astronomical observations at night. This event will also fit into the IYA2009 Cornerstone Project, *100 hours of astronomy*.

6. **Public Observations** – Every Friday and Saturday evening for 43 years of, since the first telescopes were installed at the top of the Dizdar’s Tower (adapted and reconstructed for the Public Observatory), volunteers and associates of ASRB have demonstrated objects in the night sky introducing telescopes, interesting celestial bodies and astrophysical phenomena to the general public. The programme takes place every Friday and Saturday from sunset to 10 pm. This programme will be connected to the IYA2009 Cornerstone Project, *Portal to the Universe*.
7. Advanced Course for talented children – astronomical Olympiads. This programme started in 2005 and in just three years, the Serbian astronomical team has won 13 medals at the International Astronomical Olympiads. At the last Olympiad (Semeiz, Ukraine) Serbia won 2 gold, 2 silver and 3 bronze medals. This advanced course begins in January and lasts until October. Theoretical lectures and practical astronomical observations are given at the Public Observatory on Saturday afternoons. This programme could also be connected to IYA2009 Cornerstone Project, Portal to the Universe.

8. Teachers’ Training Programme – New Project. The Serbian Ministry of Education has officially accepted this project and included it in the Catalogue of training courses for teachers in Serbia. The first course was held at the Public Observatory in May 2007 with 25 teachers from Belgrade and other Serbian towns. The course lasts 2-3 days and includes 20 theoretical lectures, 6 hours of practical observations and 4 hours of discussion. This programme could become a part of the IYA2009 Cornerstone Project, Galileo Teacher Training Programme.

9. Science Fiction Course – New Project. During the winter season 15 lectures will be given at the Public Observatory, once a week. This programme will be connected to IYA2009 Cornerstone Project Universe Awareness.

10. Multidisciplinary studies – Astronomy. Inspiration. Art. – New Project. The main goal of the project is to gather together artists and scientists to talk about the Universe and to inspire each other. This programme will be connected to the IYA2009 Cornerstone Projects: Universe Awareness and The Universe from the Earth – An Exhibit of Astronomical Images.