DEPARTMENT OF ASTRONOMY AT THE FACULTY OF MATHEMATICS, UNIVERSITY OF BELGRADE IN THE PERIOD 1999-2020

B. ARBUTINA, O. ATANACKOVIĆ and A. KOVAČEVIĆ

Department of Astronomy, Faculty of Mathematics, University of Belgrade, Studentski trg 16, 11000 Belgrade, Serbia E-mail: arbo@matf.bg.ac.rs

Abstract. This contribution represents an attempt to give a brief overview of the development of the Department of Astronomy, Faculty of Mathematics, University of Belgrade in the period 1999-2020. It is primarily based on the paper in Serbian by Atanacković, Arbutina and Kovačević (2019) that chronologically covered in much more detail the period 1999-2018, and, in a sense, it is also a sequel to a paper by Milogradov-Turin (2003) that covered the history of the teaching of astronomy and Astronomy group at the University of Belgrade, from the beginnings until 2002. We hope that this contribution will serve as a valuable historical source to the future generations of Serbian astronomers.

1. INTRODUCTION

In this contributed paper we give a brief overview of the development of the Department of Astronomy, Faculty of Mathematics (MATF), University of Belgrade in the period 1999-2020. The paper is primarily based on the paper by Atanacković et al. (2019), that chronologically covered in much more detail the period 1999-2018. This 20-year period was chosen since there are reviews of previous periods, published by Simovljević (1980) and Simovljević and Milogradov-Turin (1998) covering topics: Astronomy until 1947, Astronomy Group 1947-1977 and Astronomy Group 1978-1998 (all referring to the activities of the Department of Astronomy) at the University of Belgrade. All the previously mentioned papers are written in Serbian. In a sense, this is also a sequel to a lecture/paper by Milogradov-Turin (2003) that covered the history of the teaching of astronomy and Astronomy group at the University of Belgrade, from the beginnings until 2002 (in English). Many information can also be found in review papers and triennial reports on astronomy education in Serbia (Atanacković 2009, 2012, 2013, 2017, 2018, Atanacković and Arbutina 2021). Years 1999 and 2020 have another interesting common feature. In the 2nd semester of school year 1998/1999 the teaching activities stopped (until June 1999) due to NATO bombing of FR Yugoslavia, while in the 2nd semester of school year 2019/2020 the classes stopped, and then continued online, due to the outbreak of SARS-CoV-2 pandemic.

2. OVERVIEW

Here we briefly recapitulate detailed chronology of the period 1999-2018 published in Atanacković et al (2019) and present recent developments in the years 2019 and 2020.

In the school year 1998/99 the teaching staff at the Department of Astronomy was:

Dr Dragutin M. Djurović, Full Professor,

Dr Trajko D. Angelov, Full Professor,

Dr Mike S. Kuzmanoski, Full Professor,

Dr Jelena S. Milogradov-Turin, Associate Professor,

Dr Ištvan I. Vince, Associate Professor (1/3 working hours),

Dr Nadežda R. Pejović, Associate Professor,

Dr Stevo D. Šegan, Associate Professor,

Dr Olga M. Atanacković-Vukmanović, Assistant Professor,

Dr Zlatko S. Čatović, Assistant Professor,

Mr Dejan V. Urošević, Teaching Assistant,

Andjelka B. Kovačević, Junior Teaching Assistant,

Jelena I. Petrović, Junior Teaching Assistant.

The study program consisted of two subprograms (majors, moduls) at undergraduate level (4 years): Astronomy and Astrophysics. At MSc level (2 years of exams + MSc thesis) there were four subprograms (subspecializations) that a student could choose: Fundamental astronomy, Celestial mechanics, Stellar astronomy and Astrophysics, while at PhD level a student did not have any courses, only research i.e. work on the thesis. Depending on subspecialization, at the graduate level student would obtain MSc or PhD degree in Astronomy or in Astrophysics.

In the period after 2006 there were several redefinitions and accreditations of study programs. Starting with school year 2006/2007, undergraduate and master studies have new curricula (4+1 years, according to the Bologna convention). PhD studies last 3 + 3 years (or more if needed), for the exams and work on the thesis, respectively. At all levels there are two modules: *Astronomy* and *Astrophysics*.

School year 2009/2010 brings redefinition and accreditation of three study programs at the Faculty of Mathematics, University of Belgrade: "Mathematics", "Informatics" and "Astronomy and astrophysics". At the "Astronomy and astrophysics" program, at undergraduate level there are three moduls: *Computational mechanics* and astrodynamics, Astrophysics and Astroinformatics (introduced on initiative of Nadežda Pejović), at master level two modules: Astronomy and Astrophysics, while at PhD level two earlier modules merged into single modul Astronomy and astrophysics (upon defending the thesis, the student acquires a title "PhD in Astronomical Sciences"). At other programs at the Faculty of Mathematics one compulsory and several elective courses in astronomy have been introduced (for the students of mathematics and informatics), while at the Faculty of Physics there is one compulsory course in astrophysics and one elective course in astronomy. Since the Department of Mechanics at MATF practically ceased to exist in this period due to the lack of teaching staff, the Department of Astronomy took over some (elective) courses in mechanics. New study programs, accredited by the end of 2014, started in the 2015/2016 academic year. The study program "Astronomy and astrophysics" consists of two moduls: *Astroinformatics* and *Astrophysics* at undergraduate and master levels. Within the study program "Mathematics" there is now a modul *Astronomy* at undergraduate, and a modul *Astronomy and mechanics* at master level. At PhD level there is one module *Astronomy and astrophysics*.

The total number of graduated and postgraduated students so far is:

- 309 graduated students,
- 45 master theses (from 2007),
- 69 MSc theses (until 2011), and
- 61 PhD theses defended

For some statistics on students, see Arbutina and Atanacković (2019). There is a general trend of increasing number of graduated students over the years (the first was Slobodanka Dimitrijević in 1936) as well as number of MSc and PhD degrees awarded (the first were Sofija Sadžakov in 1968, and Zaharije Brkić in 1958, respectively). Roughly half of the graduate students are women, while this percentage drops as we go on towards the PhD level. The Department's website contains links to the great majority of astronomical PhD theses which, as well as other publications, were scanned and archived in MATF Virtual library (http://elibrary.matf.bg.ac.rs/), largely thanks to the efforts of Nadežda Pejović. Among these publications are magazines Saturn and Vasiona, Publications of Astronomical Society "Rudjer Bošković", Publications of Department of Astronomy, Nautički godišnjak, many hundreds digitised books and textbooks, e.g. by Atanasije Stojković, Djordje Stanojević, Milan Andonović and Kosta Stojanović (Pejović and Mijajlović 2011, Pejović et al. 2012). Nadežda Pejović also initiated the creation of Digital Legacy of Milutin Milanković at MATF in 2012 (Pejović at al. 2013, Jovanović et al. 2020). A number of textbooks and monographs were also published by the Department stuff during the 1999-2020 period (all the lists are available at http://astro.matf.bg.ac.rs/). In 2008 an interactive website BAZA at http://alas.matf.bg.ac.rs/~astrobaza/ was launched, with the aim of bringing together, at least virtually, the Belgrade astronomical community, now spread across the globe (Atanacković et al. 2009).

Students at the Department of Astronomy, beside classes, participate in numerous curricular and extracurricular activities. *Student Astronomy Workshops* are conceived as meetings of astronomy students from the University of Belgrade and the University of Novi Sad. They have been organized since 2007 on the initiative of Dragana Ilić and Tijana Prodanović and held in Belgrade and Novi Sad, alternately. The program includes introductory lectures, short presentations of student papers, exchange of experiences, etc. *The Student Summer Internship* has also been held since 2007 at the Ondřejov Observatory, Czech Republic. These students' practices in observations and data reduction started on the initiative of Olga Atanacković and Nikola Vitas. The agreement on the cooperation was signed in 2008 by Prof. Petr Heinzel, the director of the Ondřejov Observatory and Prof. Miodrag Mateljević, the dean of the Faculty of Mathematics. Stevo Šegan gave a significant contribution to its practical realization, as well as Brankica Šurlan, who took care of students at the Ondřejov

Observatory. The internship is attended by third and fourth year students during the summer, for two to three weeks. Students are involved in the scientific work of professional astronomers and astrophysicists in the Department of Solar Physics, Department of Stellar Physics, Department of Interplanetary Matter Studies, and Department of the Study of Galaxies and Planetary Systems of the Ondřejov Observatory. Since 2012 students participate in *Student Training at Astronomical Station Vidojevica (http://vidojevica.aob.rs/)*. Participants in the internship are students of the University of Belgrade and University of Novi Sad, which are under the expert guidance of teachers and associates of these two institutions and the Astronomical Observatory of Belgrade (AOB). From 2014 until 2017 students themselves organized four *Schools of Astronomy* (twice per week) for high-school pupils and younger people at Belgrade Youth Center. Each year on November 8 the "Prof. Dr. Zaharije Brkić" Award is given to the best graduated student at the Department of Astronomy (provided that certain conditions are met, concerning the grade point average and duration of study). Since 1981, 33 students have received the award.

Members of the Department of Astronomy participated in the scientific projects supported by the Ministry of Science (and Education) of the Republic of Serbia in all project periods: 2002-2005, 2006-2010 and 2011-2019. In the last project period one astronomy project was primarily based at the Faculty of Mathematics: No. 176005 "Emission nebulae: structure and evolution" with PI Dejan Urošević. Through this project several young people were employed at the Faculty of Mathematics as research staff. There were also other domestic and international projects realized, such as FP7 project *Stardust* (coordinator Bojan Novaković), project "Pavle Savić" (2013-2014) between Department of Astronomy (Olga Atanacković, Irena Pirković), AOB (Slobodan Jankov, Ivan Milić) and University of Nice (Marianne Faurobert), projects of interacademies cooperation (Serbian Academy of Sciences and Arts and Bulgarian Academy of Science, 2014-2016, 2017-2019, 2020-2022, PIs Dejan Urošević, Bojan Arbutina and Milica Vučetić, respectively), as well as project *Superast* (2019-2020, PI Andjelka Kovačević), through which a small cluster computer was obtained for the Department.

In year 2000, the first ideas emerged about building a new astronomical station at the Vidojevica mountain near Prokuplje. This project, certainly one of the most important in Serbian astronomy in the last decades, was initiated by the MATF and its professors Stevo Šegan and Žarko Mijajlović, who were immediately joined by Nadežda Pejović, head of the Department of Astronomy at the time. In 2004 MATF withdrew from the project in favor of AOB, since the Ministry of Science demanded to have only one party involved (Mijajlović 2007). The 60 cm "Nedeljković" telescope (2011) and the 1.4 m "Milanković" telescope (2016) were installed on site.

From the school year 2011/2012 the University of Belgrade together with 4 other institutions (Institute of Astro- and Particle Physics, University of Innsbruck, Austria; Department of Astronomy, University of Padua, Italy; Astrophysics Section/Department of Physics, University of Rome "Tor Vergata", Italy; Institute for Astrophysics, Department of Astronomy, University of Göttingen, Germany) participated in the international Erasmus Mundus two-year master program - *Astromundus* (thanks to the initiative of Luka Popović and Dragana Ilić). The teaching staff of the Department involved in the realization of the program were: Luka Popović, Dejan Urošević, Andjelka Kovačević, Dragana Ilić, Bojan Arbutina, Dušan Onić (from the school year 2018/19). Through this program a number of foreign students from countries all around the world had a possibility to live and study in Belgrade for one semester or more. The program officially ended in January 2020.

In 1992 Astronomical Observatory of Belgrade and Faculty of Mathematics started to jointly publish a scientific journal Bulletin Astronomique de Belgrade, which changed its name to Serbian Astronomical Journal in 1998. In 2003 Dejan Urošević became Editor and Nikola Vitas Assistant Editor of the Serbian Astronomical Journal (SAJ), which also got its electronic edition at http://saj.matf.bg.ac.rs/. Editor-in-Chief was Zoran Knežević (AOB). In 2006 Nikola Vitas left Serbia and Bojan Arbutina became the Assistant Editor. In 2013 SAJ got international recognition by appearing in SCI or JCR list (Journal Citation Report) at the position 41/59 in the field Astronomy and Astrophysics, with impact factor IF=1.1 (Knežević et al. 2017). In 2014 Dejan Urošević became Editor-in-Chief, Bojan Arbutina Editor and Milena Jovanović (AOB) Assistant Editor.

In the summer of 2018 Serbia became a member of the Board of Directors of the Astronomy & Astrophysics (A&A) journal. Negotiations began in May 2017 at the initiative of the Department of Astronomy. The accession was voted at the meeting of the Board of Directors on May 15, 2018, and the agreement entered into force on July 1 (signed on June 11 by ESO Director Prof. Dr. Xavier Barcons and AOB Director Dr. Gojko Djurašević). Previously, an agreement between AOB and MATF was signed on the representation of Serbia and the payment of membership fees. The annual membership fee is divided between the MATF and the AOB. According to the contract, all astronomers who have an affiliation in Serbia can publish their works in A&A free of charge. The first representative of Serbia in the Board of Directors is Andjelka Kovačević.

All professors of the Department were members of the International Astronomical Union (IAU) and actively participated in its commissions. Serbian representatives (National Liaisons) in the IAU Commission 46 for astronomy education were Jelena Milogradov-Turin (until 2003) and Olga Atanacković (2003-2015). The Office of Astronomy for Education (OAE) founded in January 2020 within the IAU Commission C1 has established a network of NAECs (National Astronomy Education Coordinators). Members of the Serbian NAEC team are: Olga Atanacković (chair), Dragana Ilić (contact person), Jelena Kovačević-Dojčinović and Bojan Arbutina.

In 2002 Jelena Milogradov-Turin initiated Serbian team participation in International Astronomical Olympiads for high-school pupils and became the president of the National Astronomical Olympic Committee (see Vidojević et al. 2018). She was succeeded at this position by Nadežda Pejović (2005-2006), Slobodan Ninković (2006-2014) and Sonja Vidojević (2014-). So far the Serbian teams have participated in three types of International Astronomical Olympiads and won 78 medals and 21 recognitions in total (Vidojević et al. 2018, Vidojević et al. 2021).

In the 20-year period under consideration members of the Department had diverse duties, out of which we will mention here only some:

Head of Department

Mike Kuzmanovski (1998-1999) Nadežda Pejović (1999-2003) Trajko Angelov (2003-2005) Olga Atanacković (2005-2007) Trajko Angelov (2007) Dejan Urošević (2007-2013) Nadežda Pejović (2013-2017) Andjelka Kovačević (2017-2020) Bojan Arbutina (2020-)

Vice-dean for finance of MATF

Stevo Šegan (1998-2000) Dejan Urošević (2004-2007 and 2014-)

President of the Society of Astronomers of Serbia

Jelena Milogradov-Turin (1998-2002) Stevo Šegan (2014-2017) Vladimir Djošović (2019-2020)

President of the National Comittee for Astronomy

Olga Atanacković-Vukmanović (2005-2008) Dragana Ilić (2014-2017) Bojan Arbutina (2017-2020)

Organization of National astronomical conferences, (co)presidents of SOC or LOC

XIII (2002) - J. Milogradov-Turin and G. Popović (SOC), O. Atanacković-Vukmanović (LOC)

XV (2008) - O. Atanacković-Vukmanović and Z. Cvetković (SOC), D. Ilić (LOC)

XVI (2011) - S. Jankov and N. Pejović (SOC), R. Pavlović (LOC)

XVII (2014) - S. Šegan and S. Ninković (SOC), A. Kovačević and B. Novaković (LOC) XVIII (2017) - L. Popović and D. Urošević (SOC), R. Pavlović (LOC)

XIX (2020) - A. Kovačević and J. Kovačević Dojčinović (SOC), D. Marčeta and D. Onić (LOC)

Organization of international summer schools, (co)presidents of SOC or LOC

2007 - The 1st Summer School in Astronomy and Geophysics - N. Pejović and M.S. Dimitrijević (SOC), A. Kovačević (LOC)

2008 - The 2nd Summer School in Astronomy - M.S. Dimitrijević and T. Prodanović (SOC), A. Kovačević (LOC)

2010 - The 3rd International School in Astronomy: Astroinformatics - Virtual Observatory - A. Kovačević and M. Dimitrijević (SOC), A. Kovačević (LOC)

The Department of Astronomy initiated a number of activities during the International Year of Astronomy 2009 (IYA2009) and global celebration of 100 years of the International Astronomical Union (IAU100). Within IYA2009 the exhibition on the cooperation between Serbia and France in the field of astronomy *Kosmos na dohvat ruke* was held from 7 to 26 September 2009 in the French Cultural Center. It was organized by J. Milogradov-Turin, O. Atanacković, D. Ilić and Z. Knežević as associates, and S. Vidojević (MSc) and many students (S.Opsenica, V.Zeković, M. Pavlović, A. Ćiprijanović, R. Vujetić, S. Zdolšek, D. Jevtić, K. Racković, J. Mišić, J. Vukadinović) as assistants. In 2009 D. Ilić was the coordinator of the exhibition "From Earth to the Universe" held in Belgrade, Novi Sad and Valjevo. On the occasion of the IAU100 the Women and Girls in Astronomy Day was marked by a series of lectures (on 8 March 2019) organized by the Department of Astronomy. The conference "Astronomy in Serbia and Serbia in International Astronomical Union", organized by MATF and AOB, was held on the 16 May 2019 in SANU. The exhibition "Researchers Night" in Belgrade. Within "IAU100 NameExoWorlds" project Serbia has voted to name the star WASP-60 Morava and its planet WASP-60b Vlasina.

Actually, during this whole 20-years period the staff members of the Department of Astronomy were very active in promotion and popularization of astronomy, e.g. through public lectures at Ilija M. Kolarac Fondation, Museum of Science and Technology, Belgrade Youth Center, Students' Cultural Center, lectures for talented highschool pupils at the Petnica Science Center, lectures at Seminar for physics teachers, etc. The Department staff also participated in numerous workshops, meetings and conferences in the country and abroad. Since 2000 every second Tuesday during the semester (occasionally more frequently) Seminar of Department of Astronomy has been held with domestic and foreign lecturers presenting their research and new astronomical discoveries. Initiator of the Seminar and coordinator until 2016 was Dejan Urošević, from January 2016 to June 2019 coordinator was Dragana Ilić, and afterward Bojan Arbutina. Until the beginning of school year 2020/2021, in total 249 lectures have been held.

3. INSTEAD OF CONCLUSION

Here we list all the persons who came or left the Department at some point, as well as our deceased professors, in the period 1999-2020.

Came to the Department: Nikola Vitas (1999/2000) Tamara Plavšin (1999/2000) Katarina Kovač (2000/01) Dragana Ilić (2002/03) Bojan Arbutina (2006/07)Dušan Onić (2007/08) Dušan Marčeta (2009/10)Bojan Novaković (2009/10)Milica Vučetić (2010/11, project 176005) Marko Pavlović (2010/11, project 176005) Aleksandra Čiprijanović (2010/11, project 176005) Slobodan Opsenica (2010/11, project 176005) Viktor Radović (2012/13) Vladimir Zeković (2012/13, project 176005) Luka Popović (2012/13, 2019/20) Stanislav Milošević (2015/16) Vladimir Jakovljević(2015/16) Kristina Racković (2016/17, 2018/19 - project 44002) Mihailo Martinović (2016/17, project 176002) Vladimir Djošović (2017/18) Ivana Bešlić (2017/18) Dušan Vukadinović (2017/18) Miljan Kolčić (2018/19) Sara Savić (2019/20) Isidora Jankov (2019/20, project 176001) Marco Fenucci (2019/20, project Stardust-R)

Left the Department:

Zlatko Ćatović (1998/99) Dragutin Djurović (retired in 2000) Tamara Plavšin (2000/01) Jelena Petrović (2000/01) Jelena Milogradov-Turin (retired in 2002) Katarina Kovač (2001/02) Nikola Vitas (2006/07)Ištvan Vince (2009/10)Trajko Angelov (retired in 2010) Mike Kuzmanoski (retired in 2012) Slobodan Opsenica (2012) Vladimir Jakovljević (2016) Stevo Šegan (2017) Nadežda Pejović (retired in 2017) Ivana Bešlić (2018) Dušan Vukadinović (2019) Miljan Kolčić (2019) Aleksandra Ciprijanović (2019)

Deceased professors:

Branislav Ševarlić (2001) Milivoj Rakić (2001) Jovan Simovljević (2007) Jelena Milogradov-Turin (2011) Dragutin Djurović (2013) Jovan Lazović (2019) Ilija Lukačević (2020) Mirjana Vukićević-Karabin (2020)

In the school year 2019/20 teaching staff at the Department of Astronomy is: Dr Olga Atanacković, Full Professor, Dr Dejan Urošević, Full Professor, Dr Luka Popović, Associate Professor (with 10% engagement), Dr Andjelka Kovačević, Associate Professor, Dr Dragana Ilić, Associate Professor, Dr Bojan Arbutina, Associate Professor, Dr Bojan Novaković, Assistant Professor,



Figure 1: Department of Astronomy staff in 2019. From left to right, the first raw: Dragana Ilić, Aleksandra Ćiprijanović, Dušan Vukadinović, Stanislav Milošević, Andjelka Kovačević, Olga Atanacković, Vladimir Djošović, Vladimir Zeković and Dejan Urošević; the second raw: Viktor Radović, Dušan Marčeta, Dušan Onić, Bojan Novaković and Bojan Arbutina (photo taken on September 13, 2019).

Dr Dušan Onić, Assistant Professor, Dr Dušan Marčeta, Assistant Professor, Dr Viktor Radović, Teaching Assistant, Stanislav Milošević, Teaching Assistant, Vladimir Djošović, Teaching Assistant Sara Savić, Junior Teaching Assistant

Additionally, research staff at the Department of Astronomy is: Dr Mihailo Martinović, Research Associate (on leave), Dr Milica Vučetić, Research Associate, Dr Marko Pavlović, Research Assistant (on leave), Vladimir Zeković, Research Assistant, Kristina Racković-Babić, Junior Research Assistant, Isidora Jankov, Junior Research Assistant, Marco Fenucci, Early Stage Researcher.

References

- Arbutina, B., Atanacković, O.: 2019, Astronomy in Serbia and Serbia in the International Astronomical Union, Proceedings of the International Astronomical Union, 349, 248.
- Atanacković, O.: 2009, Astronomy Education in Serbia 2005-2008, Publ. Astron. Obs. Belgrade, 86, 231.
- Atanacković, O., Vitas, N., Arbutina, B.: 2009, BAZA Belgrade Astronomical Community Database, Publ. Astron. Obs. Belgrade, 86, 369.
- Atanacković, O.: 2012, Astronomy Education in Serbia 2008-2011, Publ. Astron. Obs. Belgrade, 91, 273.
- Atanacković, O.: 2013, Astronomy Education and Popularization in Serbia, Publ. Astron. Obs. Belgrade, 92, 107.
- Atanacković, O.: 2017, Astronomy Education in Serbia 2011-2014, Publ. Astron. Obs. Belgrade, 96, 397.
- Atanacković, O.: 2018, Astronomy Education in Serbia 2014-2017, Publ. Astron. Obs. Belgrade, 98, 91.
- Atanacković, O., Arbutina, B.: 2021, Astronomy Education in Serbia 2017-2020, Publ. Astron. Obs. Belgrade, this volume.
- Atanacković, O., Arbutina, B., Kovačević, A.: 2019, Department of Astronomy 1999-2018, Publ. Astron. Soc. "Rudjer Bošković", 19, 197.
- Jovanović, B., Mijajlović, Z., Ninković, S., Eds.: 2020, Collected works of Nadežda Pejović, Publ. Astron. Soc. "Rudjer Bošković", 21, 1.
- Knežević, Z., Urošević, D., Arbutina, B.: 2017, Serbian Astronomical Journal in Science Citation Index and Journal Citation Report, Publ. Astron. Obs. Belgrade, 96, 523.
- Mijajlović, Z: 2007, Astronomska stanica na Vidojevici, Publ. Astron. Soc. "Rudjer Bošković", 7, 153.
- Milogradov-Turin, J.: 2003, Department of Astronomy of the University of Belgrade, Publ. Astron. Obs. Belgrade, 75, 289.
- Pejović, N., Mijajlović, Ž.: 2011, Early astronomical heritage in Virtual Library of Faculty of Mathematics in Belgrade, NCD Review, 19, 11.
- Pejović, N., Mitić, N., Malkov, S., Mijajlović, Ż.: 2013, Digital legacies and archives, Zb. radova III simp. "Matematika i primene", Faculty of Mathematics, University of Belgrade, p. 1.
- Pejović, N., Mijajlović, Ž., Valjarević, A., Damljanović, G.: 2012, Serbian Astronomical Works in the Virtual Library of the Faculty of Mathematics in Belgrade, *Publ. Astron.* Soc. "Rudjer Bošković", **11**, 311.
- Simovljević, J.: 1980, "Astronomija" in Trideset godina Prirodno-matematičkog fakulteta Univerziteta u Beogradu, s osvrtom na razvitak nastave prirodnih i matematičkih nauka u Beogradu, 1947-1977, Ed. D. Vitorović, Faculty of Natural Sciences and Mathematics, University of Belgrade, p. 165.
- Simovljević, J., Milogradov-Turin, J.: 1998, "Astronomija" in Spomenica, 125 godina Matematičkog fakulteta, Ed. N. Bokan, Faculty of Mathematics, University of Belgrade, p. 59.
- Vidojević, S., Ninković, S., Simonović B., Bešlić, I.: 2018, Astronomy Competitions and their Role in Astronomy Education in Serbia, Publ. Astron. Obs. Belgrade, 98, 217.
- Vidojević, S., Prokić, V., Ninković, S., Simonović B.: 2021, Serbia in astronomical contests between 2017 - 2020, Publ. Astron. Obs. Belgrade, this volume.