

ASTRONOMICAL INSTITUTE  
SLOVAK ACADEMY OF SCIENCES

PROCEEDINGS OF THE WORKSHOP  
OBSERVING TECHNIQUES,  
INSTRUMENTATION AND SCIENCE  
FOR METRE-CLASS TELESCOPES

II

September 24 – 28, 2018, Tatranská Lomnica, Slovakia

CONTRIBUTIONS  
OF THE ASTRONOMICAL OBSERVATORY  
SKALNATÉ PLESO

• VOLUME XLIX •

Number 2



May 2019

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2019

ISSN: 1336-0337 (on-line version)

CODEN: CAOPF8

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Editorial Office: Astronomical Institute of the Slovak Academy of Sciences  
SK - 059 60 Tatranská Lomnica, The Slovak Republic

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# PROCEEDINGS OF THE WORKSHOP

Edited by

Ján Budaj, Richard Komžík,  
Theodor Pribulla, Augustín Skopal

## OBSERVING TECHNIQUES, INSTRUMENTATION AND SCIENCE FOR METRE-CLASS TELESCOPES II

September 24 – 28, 2018, Tatranská Lomnica, Slovakia

The Astronomical Institute of the Slovak Academy of Sciences

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Matej Sekeráš  
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Alisa Shchurova



## LIST OF PARTICIPANTS

Baklanov, Aleksey	Crimean Astrophysical Observatory, Russian Federation
Barsunova, Olga Y.	Central Astronomical Observatory of RAS, Russian Federation
Bauer, Thilo	Bornheim Observatory, Germany
Bayliss, Daniel	University of Warwick, United Kingdom
Bikulova, Dinara A.	Pulkovo Observatory of RAS, Russian Federation
Brunsdon, Emily J.	University of York, United Kingdom
Budaj, Ján	Astronomical Institute, Slovak Academy of Sciences, Tatranská Lomnica, Slovakia
Cabezas, Mauricio E.	Astronomical Institute of the Academy of Sciences of the Czech Republic, Czech Republic
Chochol, Drahomír	Astronomical Institute, Slovak Academy of Sciences, Tatranská Lomnica, Slovakia
Dębski, Bartłomiej	Astronomical Observatory of the Jagiellonian University, Poland
Dubovský, Pavol A.	Vihorlat Observatory Humenné, Slovakia
Duffard, Rene	Instituto de Astrofísica de Andalucía - CSIC, Spain
Fedurco, Miroslav	Institute of Physics, Faculty of Science, P.J. Šafárik University, Košice, Slovakia
Gajdoš, Pavol	Institute of Physics, Faculty of Science, P.J. Šafárik University, Košice, Slovakia
Gális, Rudolf	Institute of Physics, Faculty of Science, P.J. Šafárik University, Košice, Slovakia
Garai, Zoltán	Astronomical Institute, Slovak Academy of Sciences, Tatranská Lomnica, Slovakia
Garcés, Juan	Department of Astronomy. Universidad de Concepción, Chile
Godunova, Vira	ICAMER Observatory of NASU, Ukraine
Golysheva, Polina Y.	Sternberg Astronomical Institute, Lomonosov Moscow State University, Russian Federation
Hambálek, Ľubomír	Astronomical Institute Slovak Academy of Sciences, Tatranská Lomnica, Slovakia
Harris, Robert James	Zentrum für Astronomie der Universität Heidelberg, Landessternwarte, Germany
Holdsworth, Daniel	North-West University, South Africa; UCLan, United Kingdom
Isogai, Keisuke	Department of Astronomy, Kyoto University, Japan
Kabáth, Petr	Astronomical Institute of Czech Academy of Sciences, Czech Republic

Kartashova, Anna	Institute of Astronomy, Russian Academy of Sciences, Russian Federation
Katysheva, Nataly A.	Sternberg State Astronomical Institute, Lomonosov Moscow State University, Russian Federation
Kılıçoğlu, Tolgahan	Ankara University, Faculty of Science, Department of Astronomy and Space Sciences, Turkey
Knežević, Sladjana	Astronomical Observatory Belgrade, Republic of Serbia
Kornoš, Leonard	Faculty of Mathematics, Physics and Informatics, Comenius University, Bratislava, Slovakia
Kostić, Petar	Astronomical Observatory of Belgrade, Astronomical Station Vidojevica, Republic of Serbia
Krushevskaja, Viktoriia	Main astronomical observatory of National academy of sciences of Ukraine, Ukraine
Kudak, Viktor	Institute of Physics, Faculty of Science, P.J. Šafárik University, Košice, Slovakia
Kundra, Emil	Astronomical Institute, Slovak Academy of Sciences, Tatranská Lomnica, Slovakia
Kurtenkov, Alexander	Institute of Astronomy and National Astronomical Observatory, Bulgarian Academy of Sciences, Bulgaria
Kuznyetsova, Yuliana	Main astronomical observatory of National academy of sciences of Ukraine, Ukraine
Kvernadze, Teimuraz	Abastumani Astrophysical Observatory, Ilia State University, Georgia
Lee, Chung-Uk	Korea Astronomy and Space Science Institute, Republic of Korea
Lee, Dong-Joo	Korea Astronomy and Space Science Institute 776, Daedeokdae-ro, Yuseong-gu, Daejeon, Republic of Korea
Lendl, Monika	Space Research Institute, Austrian Academy of Sciences, Austria
Maciejewski, Gracjan	Nicolaus Copernicus University, Poland
Mallon, Matthias	Leibniz Institute for Astrophysics Potsdam (AIP), Germany
Mennickent, Ronald	Department of Astronomy, University of Concepción, Chile
Merc, Jaroslav	Institute of Physics, P.J. Šafárik University, Košice, Slovakia; Astronomical Institute of Charles University, Prague, Czech Republic
Mugrauer, Markus	Astrophysical Institute and University Observatory Jena, Germany
Munari, Ulisse	National Institute of Astrophysics INAF, Astronomical Observatory of Padova, Italy

Ogłóza, Waldemar	Pedagogical University of Cracow, Poland
Özavcı, İbrahim	Ankara University Department of Astronomy and Space Sciences, Turkey
Pakštienė, Erika	Institute of Theoretical Physics and Astronomy, Physics Department, Vilnius University, Lithuania
Panko, Elena	I.I. Mechnikov Odessa National University, Odessa, Ukraine
Parimucha, Štefan	Institute of Physics, University of P.J. Šafárik in Košice, Slovakia
Paunzen, Ernst	Department of Theoretical Physics & Astrophysics, Masaryk University, Czech Republic
Pavlenko, Elena P.	Crimean Astrophysical Observatory, Russian Federation
Pawlak, Michal	Institute of Theoretical Physics, Faculty of Mathematics and Physics, Charles University in Prague, Czech Republic
Polińska, Magdalena	Institute Astronomical Observatory, Adam Mickiewicz University in Poznań, Poland
Pollmann, Ernst	51375 Leverkusen, Emil-Nolde-Str. 12, Germany
Pravec, Petr	Astronomical Institute AS CR, Ondřejov, Czech Republic
Pribulla, Theodor E.	Astronomical Institute, Slovak Academy of Sciences, Tatranská Lomnica, Slovakia
Ratajczak, Milena	University of Wrocław, Poland
Roettenbacher, Rachael	Yale University, United States
Schroeff, Thomas	WAA Wiener Arbeitsgemeinschaft für Astronomie, Austria
Sekeráš, Matej	Astronomical Institute, Slovak Academy of Sciences, Tatranská Lomnica, Slovakia
Seli, Bálint A.	Konkoly Observatory, MTA CSFK, Budapest, Hungary
Shagatova, Natalia	Astronomical Institute, Slovak Academy of Sciences, Tatranská Lomnica, Slovakia
Shchurova, Alisa	Astronomical Institute, Slovak Academy of Sciences, Tatranská Lomnica, Slovakia
Shporer, Avi	MIT, United States
Shugarov, Andrey	Institute of Astronomy, Russian Academy of Sciences (INASAN), Russian Federation
Shugarov, Sergey Y.	Astronomical Institute, Slovak Academy of Sciences, Tatranská Lomnica, Slovakia; Sternberg Astronomical Institute of Moscow University, Russian Federation
Simon, Andrii	Taras Shevchenko National University of Kyiv, Ukraine

Skarka, Marek	Department of Theoretical Physics and Astrophysics, Masaryk University, Czech Republic
Skopal, Augustin	Astronomical Institute, Slovak Academy of Sciences, Tatranská Lomnica, Slovakia
Stanik, Kristina	Astronomical Observatory of Belgrade, Republic of Serbia
Szabados, László	Konkoly Observatory of the Hungarian Academy of Sciences, Hungary
Šilha, Jiří	Faculty of Mathematics, Physics and Informatics, Comenius University, Bratislava, Slovakia
Taşpinar, Özlem	Akdeniz University - Department of Space Science & Technologies, Turkey
Teyssier, François	ARAS, France
Tóth, Juraj	Faculty of Mathematics, Physics and Informatics, Comenius University in Bratislava, Slovakia
Tsvetkov, Dmitry	Sternberg Astronomical Institute, Russian Federation
Tunç, Efekan	Akdeniz University - Department of Space Science & Technologies, Turkey
Volkov, Igor M.	Institute of Astronomy of Academy of Sciences, Moscow; Sternberg State Astronomical Institute, Moscow, Russian Federation
Vos, Joris	Institut für Physik und Astronomie, University of Potsdam, Germany
Vrašťák, Martin	Czech astronomical society, Variable Star and Exoplanet section, Slovakia
Vudragović, Ana	Astronomical Observatory Belgrade, Republic of Serbia
Vukotić, Branislav	Astronomical Observatory, Republic of Serbia
Yilmaz, Mesut	Ankara University, Turkey
Yücel, Gökhan	Department of Space Science and Technology, Akdeniz University, Turkey
Zampieri, Luca	INAF-Astronomical Observatory of Padova, Italy
Zasche, Petr	Astronomical Institute, Faculty of Mathematics and Physics, Charles University, Czech Republic
Zejda, Miloslav	Dept. of Theoretical Physics and Astrophysics, Masaryk University, Brno, Czech Republic
Zhou, George	Harvard-Smithsonian Center for Astrophysics, United States
Zieliński, Paweł	Warsaw University Astronomical Observatory, Poland
Zoła, Stanisław	Astronomical Observatory, Jagiellonian University, Poland
Zwitter, Tomaž	University of Ljubljana, Faculty of Mathematics and Physics, Slovenia

## PREFACE

The metre-class telescopes are still vital for current astrophysics. Although large telescopes excel in the studies of faint objects at the edge of the observable Universe and provide high-angular and spectral resolution of astrophysically important objects, small telescopes (diameter  $< 2$  m) are valuable in long-term monitoring, continuous observations or large-scale surveys. A large flotilla of small telescopes can often provide observations which would be cost-prohibitive for large telescopes. Most of astrophysically crucial objects/events are still being discovered through extensive all-sky surveys run by robotic telescopes, or by very small telescopes of well-organized amateur astronomers. Also, small telescopes continue to play a vital role in recruiting and training the next generation of astronomers and instrumentalists, and serve as test beds for developments of novel instruments and experimental methods for larger telescopes. Moreover, a metre-class telescope is available at almost any historical observatory and, after some effort, can be turned into a powerful instrument. This requires better focal instrumentation and modern telescope control.

This book contains proceedings of the 2<sup>nd</sup> international conference on the role of small telescopes in astrophysics. *Observing techniques, instrumentation and science for metre-class telescopes II*. It took place in the Congress Center Academia near a village called Tatranská Lomnica at the foothill of the scenic High Tatra mountains in the northern Slovakia from September 24 to September 28, 2018. Its program was divided into three sessions: *A: Observing techniques and instrumentation for metre-class telescopes*, *B: Science with small telescopes*, and *C: Ground-based support of cosmic missions and telescope networks*. The first conference of this series was held at the same place in 2013. The conference commemorates the 75<sup>th</sup> anniversary of the very first observation performed at the Skalnaté Pleso Observatory. Currently, thanks to the European Regional Development Fund (ITMS No. 26220120029), a new 1.3 m telescope, equipped with several advanced focal instruments, was inaugurated.

The SOC thanks all the participants for their high-level contributions. Ninety participants from 22 countries took part in the meeting. The organizers are indebted to the Astronomical Institute of the Slovak Academy of Sciences for general support and also to the Congress Center Academia for smooth cooperation during the conference. We thank the members of the LOC: Ľubomír Hambálek (chair), Richard Komžík, Emil Kundra, Matej Sekeráš, Natalia Shagatova, and Alisa Shchurova for their help in preparing and running this workshop. Finally, we also thank all the referees and language correctors for their hard work in peer-reviewing all contributions.

J. Budaj, T. Pribulla & A. Skopal  
the editors

