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

September 24 – 28, 2018, Tatranská Lomnica, Slovakia

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Edited by

Ján Budaj, Richard Komžík,
Theodor Pribulla, Augustín Skopal

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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$^{\rm nd}$ 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$^{\rm th}$ 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