BOOK OF ABSTRACTS

Actual Questions of Ground-based Observational Astronomy

MAO - 195

Mykolaiv, September 26-29, 2016

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
RESEARCH INSTITUTE “MYKOLAIV ASTRONOMICAL OBSERVATORY”

ACTUAL QUESTIONS OF GROUND-BASED OBSERVATIONAL ASTRONOMY

International Conference

ABSTRACT BOOK

September 26-29, 2016,
Mykolaiv, Ukraine

Organizers:

Ministry of Education and Science of Ukraine
Research Institute "Mykolaiv Astronomical Observatory"
Ukrainian Astronomical Association

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The Book of Abstracts contains abstracts of presentations to the International Conference "Actual Questions of Ground-based Observational Astronomy" to be held in Mykolaiv, Ukraine, on September 26-29, 2016. Methods and technical means of ground-based observations, IVOA role in modern research and actual problems of ground-based astronomy are presented.

GENERAL INFORMATION

The International Conference "Actual Questions of Ground-based Observational Astronomy" (MAO195) will be held in Research Institute "Mykolaiv Astronomical Observatory", Mykolaiv, Ukraine on September 26-29, 2016.

The conference is organized to discuss methods and technical means of ground-based observations, IVOA role in modern research, actual problems of ground-based astronomy as well as history of astronomical research. Working languages are English, Ukrainian and Russian.

Main Topics of the Workshop:

- Methods, technical means and software for ground-based observations and data processing.
- Use of IVOA technologies for solution of modern astronomical problems.
- Results of data processing for ground-based observations.
- History of astronomical research.

Information about Participants:

- General number of registered participants – 48;
- General number of represented organizations – 22;
- Number of submitted papers – 38;
- Number of authors of submitted papers – 84.

STAR PHOTOMETRY ON DIGITIZED ASTRONEGATIVES

V. Andruk[1], L. Pakuliak[1], V. Golovnia[1], S. Shatokhina[1], O. Yizhakevych[1], Yu. Protsyuk[2], I. Eglitis[3], M. Eglite[3], L. Kazantseva[4], H. Relke[5], Q. Yuldoshev[6], M. Muminov[6]

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[6] *Ulugh Beg Astronomical Institute of the Uzbek Academy of Sciences, Tashkent, Uzbekistan*

This paper discusses the issues of characteristic curve restoration for astronegatives exposed in the wide range of expositions in U, B, V Johnson color bands using different telescopes. Photographic plates are digitized by Epson commercial scanners. Digitized images are processed in MIDAS/ ROMAFOT software. Particular attention is paid to the reliability of extremely faint object photometry. The accuracy of characteristic curve restoration using photoelectric data is in the range 0.1-0.2 ^{m}.

THE AFR-2 SOLAR TELESCOPE MODERNIZATION

S.V. Apunevych, Ya.T. Blagodyr, A.I. Bilinsky, M.M. Kovalchuk, K.P. Martynyuk-Lototskyy, I.Ya. Pidstryhach, M.I. Stodilka, Ye.B. Vovchyk

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The AFR-2 is an optical telescope for the detailed observations of Solar chromosphere and photosphere in the H‑alpha narrowband spectral region. It is part of AO LNU ground based Solar observations service. The observations have been performed since 60s of the twentieth century. That's why the telescope needs modernization very much.

The main purpose of the upgrade was to change a film based receiver by CCD camera. Such modification led both to the rearrangement of the optical components in the telescope optical path and corresponding