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

Scientific Organizing Committee:

Shulga O. (RI "MAO", Ukraine, Co-Chairman)
Yatskiv Ya. (MAO NASU, Ukraine, Co-Chairman)
Konovalenko O. (IRA NASU, Ukraine)
Fedorov P. (RIA KhNU, Ukraine)
Vavilova I. (MAO NASU, Ukraine)
Reznichenko O. (IRA NASU, Ukraine)
Koshkin M. (RI AO ONU, Ukraine)
Protsyuk Yu. (RI "MAO", Ukraine)
Eglitis I. (IA UL, Latvia)
Tang Z. (ShAO, China)
Kudzej I. (VO, Slovakia)

Local Organizing Committee (RI "MAO", Ukraine):

Protsyuk Yu. (Chairman)
Maigurova N. (Secretary)
Mazhaev O.
Sibiryakova E.
Koval V.
Doniy L.
Fomenko L.
Kryuchkovsky V.
Kaluzhny M.
Vovk V.
Bondarchuk L.
Bodryagin D.
Kulichenko M.
Pomazan A.

A 19 **Actual Questions of Ground-based Observational Astronomy.**
International Conference. Abstract Book. — Mykolaiv: 2016. — 40 p.

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.

It is evident that it is the minimum difference (O-C) that corresponds to the actual position of the orbital plane.

Thus, to ultimately determine the orbital plane using a modified Gauss' method, a priori information on the pattern of the celestial body's motion is required, particularly, whether its motion is direct or retrograde. This requirement is similar to that one for the application of Gauss' method for determination of orbital elements from two position vectors and instants of time.

ASTROMETRICAL STUDY OF THE SELECTED WDS STARS

D. Bodryagin, L. Bondarchuk, N. Maigurova

Research Institute "Mykolaiv Astronomical Observatory", Mykolaiv, Ukraine;
daniilmaomail@gmail.com

We present the results of double stars observations, which were carried out at the Research Institute NAO during the 2013-2016 years. For the observational program preparation we used by the Washington catalog of double stars (WDS). The observations were made by the two telescopes of the observatory (Mobitel, AMC), equipped with CCD cameras. Astrometric reduction of the received frames until the equatorial coordinates of binary and multiple systems components at the time of observation was made. The combination of the CCD received data with other Strasbourg base catalogs allowed to determine the new values of the observed stars proper motions. Parameters of mutual component configuration (position angle and separation) were measured for the 214 double stars. The analysis of the measurement results was carried out. The measurement results were published in the Journal of Double Star Observations (JDSO), and added to the WDS directory database.

SPACE RESEARCH IN BALDONE OBSERVATORY

I. Eglitis, M. Eglite

Institute of Astronomy, University of Latvia;
ilgmars@latnet.lv

At the Baldone observatory were carried out the U, B, V, R, I photometry and low resolution spectroscopy of carbon stars, the monitoring of small bodies of Solar system, the digitizing and