

BOOK OF ABSTRACTS

Actual Questions of Ground-based Observational Astronomy



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.

OBSERVATIONS OF CEPHEIDS WITH SALT FOR THE ANALYSIS OF METALLICITY GRADIENT AND LOCAL CHEMICAL COMPOSITION HETEROGENEITY IN THE MILKY WAY DISK

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The problem of radial abundance gradients in spiral galaxies is central in the field of galaxies evolution. For the Galaxy, abundance gradients as observational characteristics of the galactic disk are among the most important input parameters in any theory of galactic chemical evolution. In recent years, great progress has been made on the distribution of abundances across the disk of the Galaxy, but many questions concerning the present-day abundance distribution in the galactic disk, its spatial properties, and evolution with time, remain to be answered.

We started to use the High Resolution Spectrograph (HRS) of the Southern African Large Telescope (SALT) to obtain the high-resolution spectroscopic observations of a sample of Cepheids which we are going to use:

(1) To derive the shape of the abundance gradients in the inner parts of the Milky Way,

(2) To strongly constraint the galactic chemo-dynamical models,

(3) To extract the possible objects belonging to the Population II.

We will present first observations, data reduction procedure and results.

POLARIS: HISTORY OF PULSATONAL ACTIVITY SINCE DISCOVERY

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We have analyzed the pulsation activity of small-amplitude Cepheid Alpha UMi (Polaris) during the period of its radial velocity