

STATE AGENCY ON SCIENCE, INNOVATION
AND INFORMATION OF UKRAINE
RESEARCH INSTITUTE “NIKOLAEV ASTRONOMICAL OBSERVATORY”

**ASTRONOMICAL RESEARCH:
FROM NEAR-EARTH SPACE
TO THE GALAXY**

International Conference

ABSTRACT BOOK

September 26-29, 2011,
Mykolaiv, Ukraine

Organizers:

State Agency on Science, Innovation and Information of Ukraine
Research Institute “Nikolaev Astronomical Observatory”
Ukrainian Astronomical Association

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I 69 International Conference “**Astronomical research: from near-Earth space to the Galaxy**”. — Mykolaiv: “Atoll”, 2011. — 72 p.

The Book of Abstracts contains abstracts of presentations to the International Conference “Astronomical research: from near-Earth space to the Galaxy” to be held in Mykolaiv, Ukraine, on September 26-29, 2011. Aspects of the positional and photometrical research of near-Earth objects, astrometry of stars and asteroids, the use of virtual technologies in astronomy, as well as historical journey of Nikolaev Observatory are given in it.

GENERAL INFORMATION

The International Conference “Astronomical research: from near-Earth space to the Galaxy” (NAO190) will be held in Research Institute “Nikolaev Astronomical Observatory”, Mykolaiv, Ukraine on September 26-29, 2011. It is devoted to the celebration of 190 anniversary of Observatory. It is organized to discuss the cooperation in research of near-Earth objects, contemporary observations of stars and asteroids, the use of virtual technologies in astrometry. Some aspects of history of Nikolaev Observatory is also discussed.

The Conference Topics will be:

- positional and photometrical research of near-Earth objects;
- astrometry of stars and asteroids: contemporary observations and virtual technologies;
- historical journey of Nikolaev Observatory.

Information about Participants:

- general number of represented organizations – 29
- number of submitted papers – 62
- number of authors of submitted papers –

The Organizing Committee is grateful for financial support of the Conference to the State Agency on Science, Innovation and Information of Ukraine, the Ukrainian Astronomical Association, Mykolaiv State Region Administration and Mykolaiv City Administration.

observations of the ERS. The number of positions for each star varies from one to more than ten. The inner precision of positions in Pul-ERS is from 4 to 150 mas. For 240 fields of ERS we obtained more than 196600 positions of stars. The 157556 stars of our compiled catalogue were identified with the stars of the UCAC3. The average differences Pul-ERS - UCAC3 for common stars is 12 mas in Right Ascension and 7 mas in Declination. The positions of stars in the Pul-ERS catalogue are given in degree and integer forms. The number of positions to compile the coordinates is given too. Besides the positions, the Pul-ERS catalogue contains magnitudes, average epochs in RA, DE and proper motions.

PROGRAM OF AUTOMATIC ASTEROID SEARCH AND DETECTION COLITEC (CLT) – THE LAST RESULTS OF APPLICATION

***V. E. Savanevich¹, A. M. Kozhukhov², A. B. Bryukhovetskiy²,
V. P. Vlasenko², E. N. Dikov³, Yu. N. Ivashchenko⁴,
L. V. Elenin⁵, V. N. Tkachov¹***

¹Kharkiv National University of Radioelectronics, Kharkiv, Ukraine;

²National Space Control and Test Centre, Evpatoria, Ukraine;

³Research and Design Institute of Micrography, Kharkiv, Ukraine;

⁴Andrushivka Astronomical Observatory, Andrushivka, Ukraine;

⁵Keldysh Institute of Applied Mathematics RAS, Moscow, Russian Federation

Modern system of asteroids detection in one night takes images of considerable sky area. The areas of such size can't be sufficiently processed using "blinking technique", especially if we are talking about wide-field "fast" astrographs detecting dozens of faint asteroids simultaneously. One of the approaches dealing with this problem is implementation of automatic asteroids detection, visually controlling obtained information.

Program of automatic asteroid search and detection CoLiTec (CLT) was created by initiative group headed by Vadim Savanevich. Now program CoLiTec (CLT) has been successfully used in two observatories: Andrushivka Astronomical Observatory (near Kiev, Ukraine, MPC code A50) and Russian remotely observatory ISON-NM (Mayhill, New Mexico, USA, MPC code H15). The present report represents results of CoLiTec (CLT) software application since May 2010.

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Міжнародна конференція «Астрономічні дослідження: від навколосемного космічного простору до Галактики». - Миколаїв: Атол, 2011. - 80 стор.

Книга містить тези доповідей на міжнародній конференції «Астрономічні дослідження: від навколосемного космічного простору до Галактики», що буде проводитись у Миколаєві, Україна з 26 по 29 вересня 2011 року. В ній викладені питання позиційних і фотометричних досліджень навколосемних об'єктів, астрометрії зірок і астероїдів, використання віртуальних технологій в галузі астрономії, а також історичний шлях Миколаївської обсерваторії.

**Міжнародна конференція
"Астрономічні дослідження: від навколосемного
космічного простору до Галактики"**

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В. Крючковський

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