

BOOK OF ABSTRACTS



Actual Questions of Ground-based Observational Astronomy

MAO-200

September 27-30, 2021, Mykolaiv, Ukraine

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

**ACTUAL QUESTIONS OF GROUND-BASED
OBSERVATIONAL ASTRONOMY**

International Conference

ABSTRACT BOOK

September 27-30, 2021,
Mykolaiv, Ukraine

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Research Institute “Mykolaiv Astronomical Observatory”
Ministry of Education and Science of Ukraine
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 27-30, 2021. Methods and technical means of ground-based observations, a role of the International Virtual Observatory Alliance (IVOA) in modern research and actual problems of ground-based astronomy are presented.

HISTORY OF MYKOLAIV ASTRONOMICAL OBSERVATORIES IN TELESCOPES

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The Mykolaiv Astronomical Observatory had three stages in the history: 1821 - 1912 (92 years), Marine Observatory (Russian empire, Maritime Department); 1913 - 1991 (78 years), Nikolaev branch of the Main (Pulkovo) Astronomical Observatory, (Russian empire and the USSR, Academy of Sciences); since 1992 (30 years), (Mykolaiv Astronomical Observatory (status of research institute since 2002), (Ukraine, Ministry of Education and Science of Ukraine).

The observatory used actual optical telescopes for positional observations at each stage of their history.

Some telescopes were used for visual observations at the first stage: Reichenbach-Ertel meridian circle (with a mercury horizon), Utzschneider passage instrument, a nine-inch Fraunhofer-Merz refractor and portable vertical Repsold circle.

At the second stage for visual and photoelectric observations: Freiberg-Kondratiev passage instrument, Repsold vertical circle, six-inch Repsold-Merz refractor, Repsold meridian circle, Zone astrograph with Ascorecord measuring machine and PARSEC measuring complex, time service passage instruments: Bamberg - 6353, APM - 10, Askania – Verke.

At the third stage some automatic and robotic telescopes with CCD cameras were created in MAO: Axial meridian circle, High-speed automatic complex, modernized AFU-75 camera, MOBITEL mobile complex (kinoteodolite (KT-50), MEZON telescope, television telescope), complex of 8 meteor telescopes for baseline observations.

Time service was carried out by the clocks: Norton since 1826, Hohwu №24 since 1875, Riefler №12 since 1894, Riefler №519 since 1894, Short №35 since 1931, Rode&Schwarz quartz clock since 1958, Hewlett-Packard rubidium standard since 1980, GPS-time since 2000.