



V INTERNATIONAL SCIENTIFIC FORUM

7-11 OCTOBER, 2024, ALMATY



KANYSH SATBAYEV 125

NUCLEAR SCIENCE AND TECHNOLOGIES

- **15th International Conference** «Nuclear and Radiation Physics»
- **4th International Conference** «Nuclear and Radiation Technologies in Medicine, Industry and Agriculture»
- **8th CERN School** «Introduction to high-energy physics»



NUCLEAR SCIENCE AND TECHNOLOGIES

Organizers of the Forum:

- Ministry of Energy of the Republic of Kazakhstan
- Ministry of Science and Higher Education of the Republic of Kazakhstan
- European Organization for Nuclear Research (CERN)
- NJSC "National Academy of Sciences of the Republic of Kazakhstan" under the President of the Republic of Kazakhstan
- International Science and Technology Center Kazakhstan (ISTC)
- Al-Farabi Kazakh National University
- L.N. Gumilyov Eurasian National University
- K. Satpayev Kazakh National Research Technical University
- JSC Kazakh-British Technical University
- Republican State Enterprise with the right of economic management "Institute of Nuclear Physics" ME RK

International Advisory Council:

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Yermakov Ye.L. (RSE REM «Institute of Nuclear Physics» ME RK) – Co-chairman and others



Registration deadline is June 30, 2024 at 00:00 (Almaty time, GMT+5)
Abstract submission deadline is June 30, 2024 at 00:00 (Almaty time, GMT+5)

Forum Topics:

Nuclear physics (Section 1):

- Mechanisms of nuclear reactions and structure of nuclei;
- Heavy and superheavy elements: synthesis and fission;
- Nuclear physics of low and medium energies, nuclear astrophysics;
- High energy and astroparticle physics, cosmology.

Energy and materials science (Section 2):

- Nuclear research and power facilities;
- Controlled thermonuclear fusion;
- Nuclear energy safety;
- Formation and evolution of defects in solids;
- Structural and fuel materials of nuclear and thermonuclear technology;
- Modification of materials by beams of plasma and charged particles;
- New materials and methods for their production, nanomaterials;
- Physics of condensed matter;
- Research and technology in alternative energy.

Radiation ecology and methods of analysis (Section 3):

- Radio-ecological studies of former nuclear test sites, risk assessment and dosimetry issues;
- Technologies for reducing the environmental risk of radiation-hazardous objects and territories, radioactive waste management;
- Analytical methods in radioecology and nuclear forensics.

4th International Conference “Nuclear and Radiation Technologies in Medicine, Industry and Agriculture” (Section 4):

Sub-Section 4-1 “Nuclear Medicine”:

- Nuclear and radiation technologies in medicine.

Sub-Section 4-2 “Radiation Technologies”:

- Radiation technologies in industry and agriculture.

8th CERN School “Introduction to high-energy physics, accelerator technology and nuclear medicine”

It is intended for undergraduates, PhD students and postgraduates in High Energy Physics, Nuclear Physics, Nuclear Medicine and Accelerator Physics. The School will include lectures of scientists from world’s leading scientific organizations.

The School will cover the following topics:

- High energy physics;
- Accelerator physics;
- Nuclear physics;
- Nuclear medicine and medical application;
- Computing and big data;
- Perspectives of LHC.

Contacts:

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Registration:

<http://indico.inp.kz/e/forum2024>

