

INR RAS

Institute for Nuclear Research of the Russian Academy of Sciences

The Institute was founded in 1970 for the further development of the experimental base and fundamental research activities in the field of atomic nucleus, elementary particle and cosmic-ray physics and neutrino astrophysics.

The Institute is one of the leading nuclear-physics centres now. The unique complex of Moscow Meson Factory based on a high current linear proton accelerator is under development. It includes a neutron research center and a beam therapy complex. The production of radioisotopes for medicine is in progress.

The Institute's neutrino studies are known all over the world. The world's best upper limit on the electron antineutrino mass was obtained. The Institute is a pioneer in underground and deep underwater neutrino physics. In the Northern Caucasus, the Institute has built the Baksan neutrino observatory with a complex of large-scale underground neutrino telescopes and large-area ground facilities for studies in the field of solar neutrinos, cosmic-ray physics and neutrino astrophysics.

At the lake Baikal, the Institute has created the first deep underwater neutrino telescope in the world. Large neutrino detectors have been built in Italy and Ukraine. The world-best results in the studies of fundamental neutrino properties and astrophysical processes dynamics have been achieved at these facilities within a wide international collaboration.

Theoretical studies of the Institute's scientists in particle and high-energy physics, quantum field theory, structure of the ground state in gauge theories, dynamics of strong interaction of hadrons beyond the perturbation theory, processes beyond the Standard Model of particle physics, the origin and properties of dark matter and dark energy, development of the theory of the origin of the baryon asymmetry of the Universe, connection between particle physics and cosmology have become known and recognized all over the world.

Unique particle detectors have been created and world-level results related to rare particle decays, relativistic nuclei collisions, photonuclear reactions, fundamental nuclear physics have been obtained in the leading scientific centres in collaboration with Russian and foreign scientists.

At the Institute, there is a Scientific Educational Centre which includes undergraduate chairs of MIPT, MSU and MEPI, graduate studentship, joint laboratories with the universities MSU, ISU, KBSU, RSU. A Dissertation Council works here.

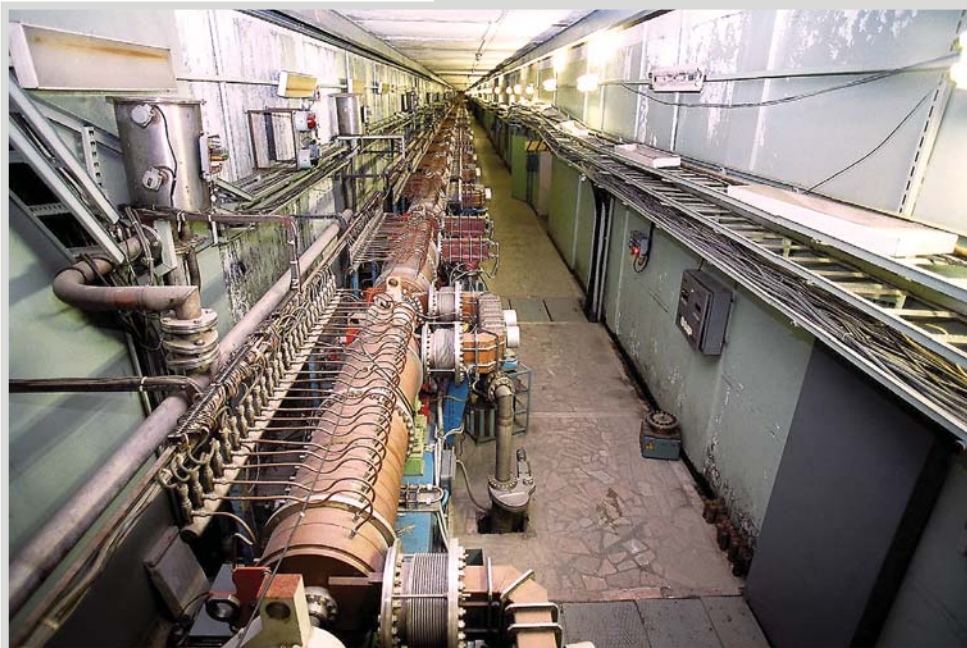
The Institute has made a significant contribution into the development of Troitsk and built Neutrino scientific town near the Baksan neutrino observatory in the Caucasus.

The staff includes more than 1000 specialists, including 3 Academicians, 6 Corresponding Members and 3 Professors of the Russian Academy of Sciences, more than 50 Doctors of Sciences (Dr. Hab.) and about 150 PhDs. Among them, there are Honoured Scientists and winners of Russian and international scientific prizes.



Комплекс лучевой терапии

Beam Therapy Complex



Сильноточный линейный ускоритель протонов ИЯИ РАН

INR High-intensity Proton Linear accelerator