14.04.02 Nuclear Physics and Engineering

Experimental Nuclear Physics, Cosmophysics and Physics of Fundamental Interactions

Program objective

To train specialists capable of research and innovation elaboration forof academic institutions and leading research centers that specialize in nuclear, particle physics and cosmophysics.

Research areas:

- Testing the Standard Model predictions, research of New physics beyond the Standard Model;
- Quark-gluon matter and its properties, the Universe evolution issues;
- Cosmic ray and fundamental issues of cosmology and astrophysics;
- High-energy processes in solar bursts, their influence on near-Earth space and upper layers of the Earth's atmosphere.

Key competences of program alumni

- preparation, simulation and conducting research experiments
- design and construction of new types of detectors for elementary particles and radiation
- experimental data processing and analysis
- new research hypotheses formulation.

Future employment opportunities

- Russian research institutions (Kurchatov Research Institute, Russian Academy of Sciences)
- Russian state corporations (Rosatom, Roscosmos, Rostech)
- Russian federal ministries and agencies

- International research centres, laboratories and institutions