

14.04.02 Nuclear Physics and Engineering

Experimental Methods of Nuclear and Particle Physics

Program objective

to train specialists for research and experiments in particle physics and physics of atomic nuclei, neutrino physics, astrophysics, cosmic ray physics, a nuclear matter of extremely high densities, and spin physics.

Program's competitive advantages

- composition of basic theoretical and practical training in physics of fundamental interactions of elementary particles, nuclei, and heavy ions
- mathematical, computer and electronic technologies for research experiments
- computer simulation with the use of experimental devices and different computer languages
- phased training of conducting a research experiment – beginning from the goal formulation through mathematical simulations of physical processes in experimental facilities and finishing with hardware and software development for an experiment, using data processing and analysis means and computer technologies.