## **03.06.01 Physics and Astronomy**

## **Nuclear and Particle Physics**

## **Program objectives**

- training researchers in physics of elementary particles for conducting experimental and theoretical research in the following areas:
  - o fundamental properties of matter
  - o nuclear reactions
  - o interaction of nuclei with beams of elementary particles at low, intermediate and high energies
  - o neutrino physics
  - o astrophysics (the origin of elements in the Universe, physics of cosmic rays);
- developing and implementing new physical methods for detecting nuclear phenomena;
- developing, designing and creating of new experimental facilities and equipment for nuclear physics research;
- elucidating the role of nuclear interactions in astrophysical phenomena and the physics of cosmic rays.