

## **03.06.01 Physics and Astronomy**

### **Devices and Methods of Medical Physics**

#### **Program objective**

training of highly qualified specialists in modern experimental physics with strong research and experimental skills to conduct research in the field of interaction of radiation with matter and application of physical methods used in diagnostics and disease therapy.

#### **Key research areas:**

- development of new methods of radiation therapy used for the treatment of cancer
- improving the diagnostic capabilities of the equipment used (spatial resolution, instrument sensitivity, etc.)
- search for new radionuclides for use in diagnostics and treatment of diseases
- creation of new diagnostic and therapeutic radiopharmaceuticals, preclinical and clinical trials

#### **Practical training and research opportunities:**

- leading national medical research centers and universities (in cardiology, endocrinology, neurosurgery, oncology, pediatric surgery, traumatology)
- leading medical research companies (Siemens Medical Solutions, GE Healthcare, Philips Medical Systems)