12.03.05 Laser Engineering and Laser Technologies

Quantum Metrology

Quantum metrology applies quantum effects and quantum mechanics in enhancing and limiting measurement precision. Research quality is of a high demand, as industry solutions and applications require increased accuracy and fast speed development.

Program objective

training of metrologists with fundamental physical and technical knowledge to provide research, design, production, as well as technological, organizational and managerial activities in modern metrology.

The main feature of the program

in-depth training in fundamental physics, mathematics and engineering.

Curriculum subject areas

- condensed matter physics
- nanostructure physics
- quantum physics
- design of devices and facilities for metrology of physical measurements.