Physics and Astronomy

South Ural State University

Degree or qualification is awarded: **Lecturer, researcher**

Language of study: **Russian**
Mode of study: **full-time**
Duration: **3 years**
Availability of free education: **yes**
Price: **169 500 RUB**

Programme webpage at the university website:
https://www.susu.ru/en/education/phd-degree-programs/030601-physics-and-astronomy-condensed-matter-physics

Programme curator: **Darovskikh Stanislav Nikiforovich**
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Computer-aided Materials Science: modelling the structure and properties of materials at the quantum-mechanical, atomic, and continuum levels.

Numerical Theory of Physical Experiments for studying the properties of fluids: development of the methods of processing the results of full-scale experiments in order to improve the reliability of determining the physical and chemical properties of fluids by means of comparing the parameters of full-scale and numerical experiments.

Quantum Informatics: theoretical building and testing the reliability of the schemes of performing quantum computing.

Objects of professional activity: physical systems of various scales and levels of organization, processes of their functioning; physical, engineering-and-physical, biophysical, physical-and-chemical, physical-and-medical and environment-protection technologies; physical expert review and monitoring.

Types of professional activity: research activity in the fields of physics and astronomy; teaching activity in the fields of physics and astronomy.

Tasks of professional activity: conducting research within the projects being fulfilled; and developing the scientific and methodological support for the fulfilment of the supervised subjects of study, courses, and disciplines (modules).

Specializations within this programme

Physics and Astronomy (Condensed Matter Physics)

Computer-aided Materials Science: modelling the structure and properties of materials at the quantum-mechanical, atomic, and continuum levels.

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