International Polytechnic Winter School " Plasma Physics and Controlled Fusion"

Peter the Great St. Petersburg Polytechnic University

Degree or qualification is awarded: Certificate

Language of study: **English** Mode of study: **distance learning** Duration: **2 weeks** Availability of free education: **no** Price: **270 Euro**

Programme webpage at the university website: https://english.spbstu.ru/education/programs/short-term-programs/winter-school/plasma-physics-controlled-fusion/

Programme curator: Department of International Educational Programs

Tel.: **+7 (812) 534-25-31** E-mail: <u>summerschool@spbstu.ru</u>

The course is suitable as the first plasma physics course or an add-on course for senior undergraduate students and graduate students. The primary objective of the course is to present the fundamentals of plasma physics particularly highlighting high-temperature plasma physics and its applications to controlled fusion. The course begins with an overview of plasma phenomena and their applications. The lectures cover Coulomb collisions, single particle motion in magnetic field, magnetic traps, principles of controlled fusion, plasma heating and diagnostics. The program also includes study visits to a tokamak laboratory and a laboratory for plasma technologies.

Duration: 2 weeks

ECTS credits: 4.0

Participation fee: 270 Euro

Cultural program

Socio-cultural program of extracurricular activities and networking events are included*: Online Interactive Campus Tour Online broadcasting of excursion to the Hermitage museum; Online Pub Quiz. *All of the listed above activities will to take place but in case any of those will have to be cancelled, an alternative event will be offered to participants.

Deadline for registration: January 10, 2021.

Specializations within this programme