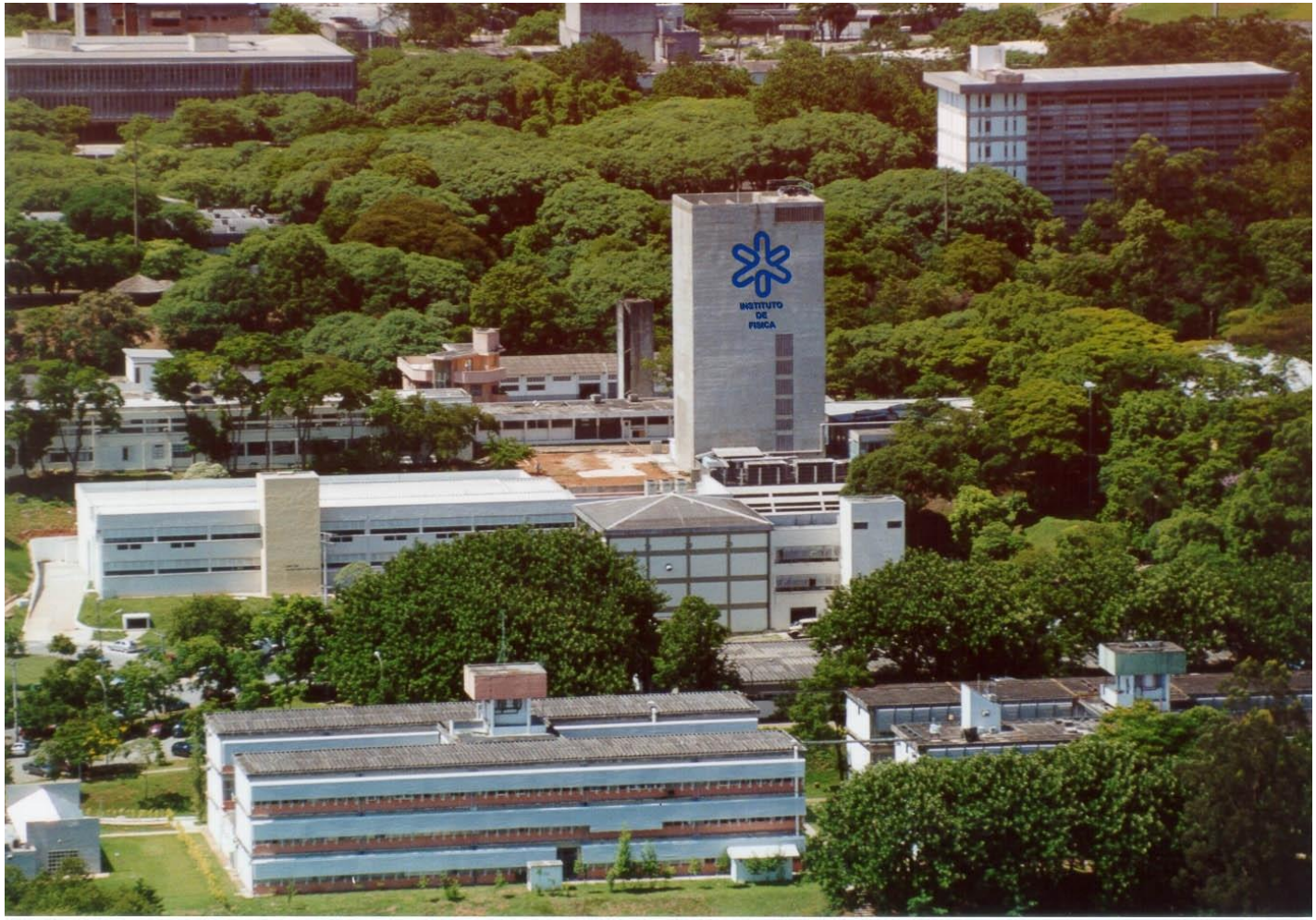

IFUSP
Instituto de Física da USP

The USP Institute of Physics is the largest Physics Teaching and Research Center in the country.



The Physics Institute of USP

~ 120 faculty members divided in 6 Departments.
~ 70 pos-doctoral researchers.
~ 1800 students (1300 undergraduate and 500 graduate).
~ 230 employees to support the activities developed in 25 buildings with 40,000 m^2 of built area.

State of the Art in Science with the greatest variety and scope of research in Physics in the country. There are dozens of research groups and laboratories where faculties, researches, technicians and students work at the frontier of knowledge.

The undergraduate courses are: Bachelor of Physics, Physics Teaching and Medical Physics in collaboration with the Medical School.

Undergraduate Courses

Bachelor of Physics

This course trains professionals who can apply and develop their skills in academic environments, such as universities and research centers; in high technology industries; and in other activities that require scientific knowledge and creativity. ~80 Degrees per year

Physics Teaching

This course forms highly qualified teachers for Teaching Physics in High School, with a strong knowledge of all general areas of physics, in addition to Didactics, Teaching Methodologies and Strategies, and Educational Psychology. ~60 Degrees per year

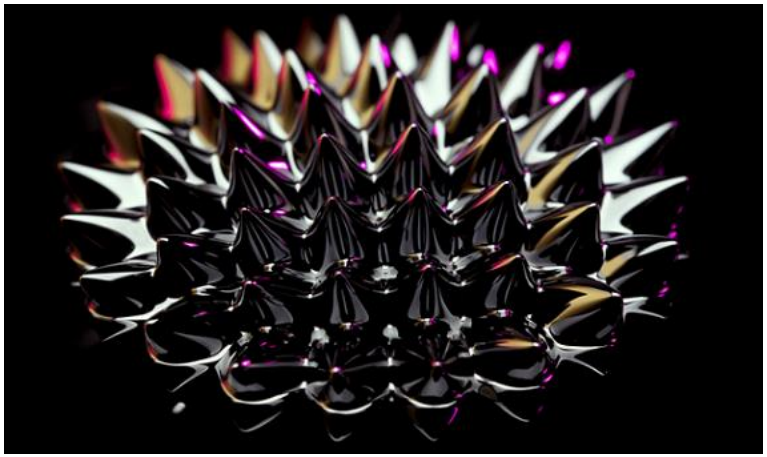
Medical Physics (since 2022)

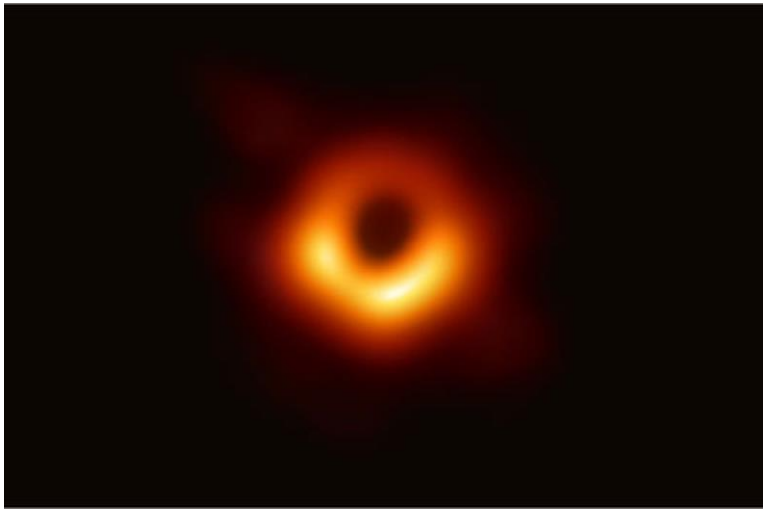
This course form professionals who can apply and develop their skills in hospitals and medical centers. It is divided into three modules:

- Basic training in physics, mathematics, computing and biomedical sciences in the Physics Institute;
- Medical applications in the Medical School;
- Practical hospital internship in the University Hospital.

Research areas

Atomic and Molecular Physics
Biophysics
Condensed Matter Physics
Cosmology
High Energy Physics
Mathematical physics
Medical Physics
Nuclear Physics
Physics Teaching
Physics of the Atmosphere
Physics of Complex Fluids
Plasma Physics
Soft Matter Physics
Statistical Physics





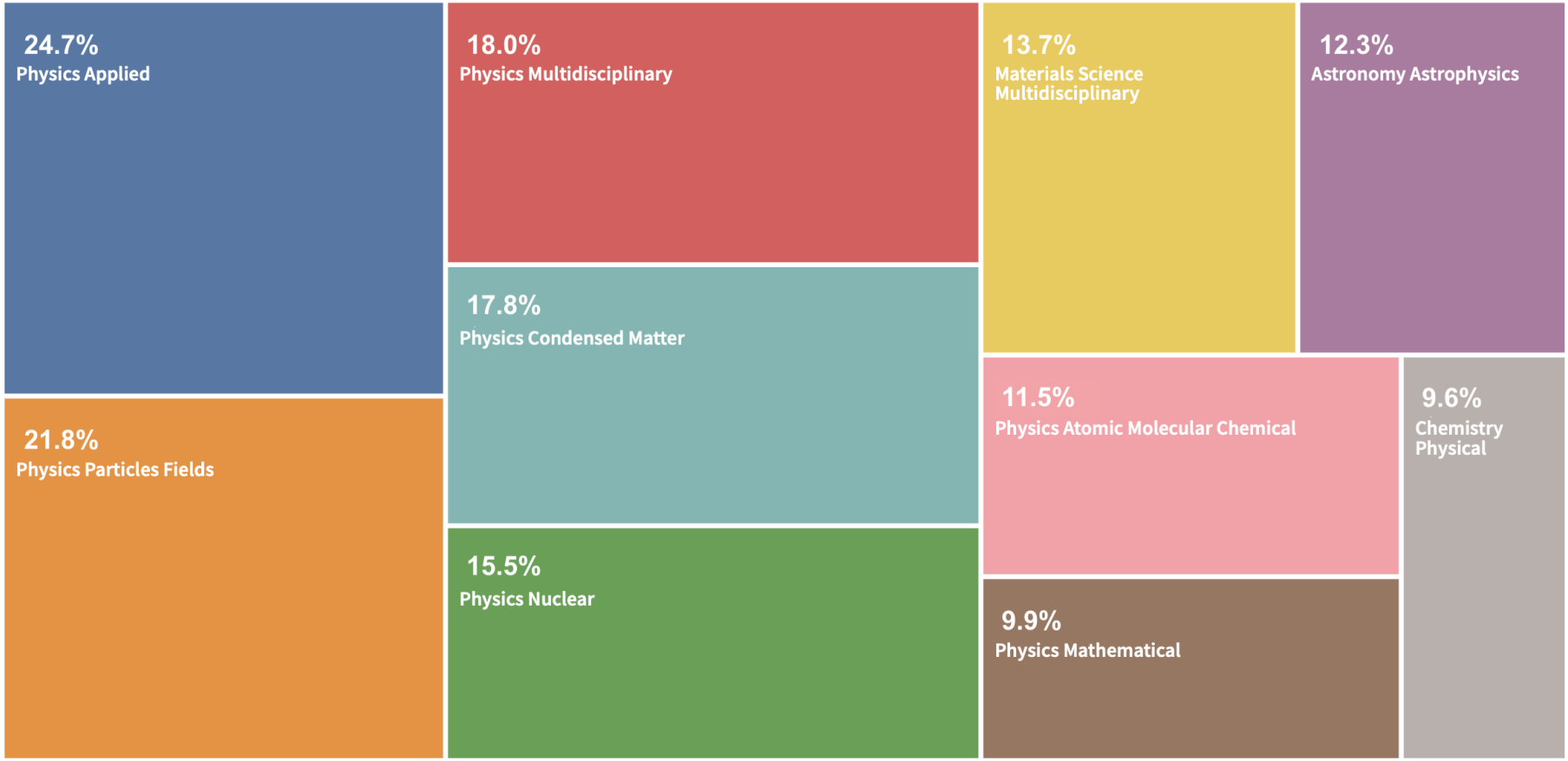
and more, both in theoretical and experimental groups including two big facilities: the Tokamak Plasma Lab and the Pelletron accelerator Lab.

Scientific production

~ 520 publications and ~25,000 citation [web-of-science] per year

~ 45 Master dissertation

~ 35 Ph.D. thesis



Best financed projects:

- Information in quantum optics (Prof. Marcelo Martinelli)
- In search of dark matter (Prof. Ivone F. M. Albuquerque)
- Synergistic effects of climate change and land use on carbon sources and sinks in the Amazon (Prof. Luiz Augusto Toledo Machado)
- High energy physics and instrumentation with LHC-CERN (Prof. Marcelo G. Munhoz)
- Particle phenomenology (Prof. Gustavo Burdman)
- Nuclear reactions with loosely bound or clustered nuclei, radioactive and stable (Prof. Alinka Lépine)
- Exploration of the QCD phase diagram (Prof. Frédérique M. B. S. Grassi)
- Non-linear dynamics (Prof. Iberê Caldas)
- Structural and biophysical properties of native and modified lipoproteins (Prof. Antonio M. Figueiredo Neto)
- The BINGO telescope: the new 21cm window for exploring the dark universe and other astrophysical questions (Prof. Elcio Abdalla)