



WHAT LIP IS

The reference institution for experimental particle physics in Portugal and the Portuguese reference partner of CERN as well as other international scientific infrastructures



Experimental particle and astroparticle physics



Development of **new instruments** and **methods**



Scientific computing

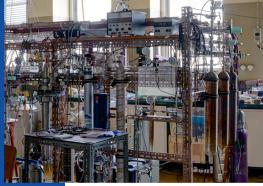


Knowledge transfer, education and outreach

WHERE LIP IS

A nation-wide laboratory working in close collaboration with the local universities









Research Areas

Experimental particle and astroparticle physics

Development of new instruments and methods

Scientific computing

Experimental particle and **astroparticle physics**



LHC experiments and **phenomenology**

Structure of **matter**



- AMBER
- HADES
- NUC-RIA



- CMS
- Phenomenology



- AMS
- AUGER
- SWGO



Dark matter and neutrino

- LUX / LZ
- SNO⁺
- DUNE
- SHiP

Research Areas

Experimental particle and astroparticle physics

Development of new instruments and methods

Scientific computing





- Neutron detectors
- RPC R&D
- Gaseous detectors R&D

Health applications

- PET Imaging
- Radiotherapy control
- Proton Therapy
- Dosimetry



- SpaceRad
- A-HEAD



Research Areas

Experimental particle and astroparticle physics

Development of new instruments and methods

Scientific computing



Scientific Computing

- R&D in information technologies
 GRID CLOUD HPC
- National and international infrastructures and consortia
- Support to the scientific community







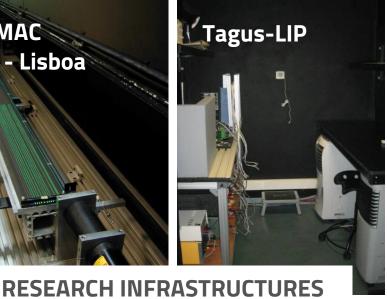


















Advanced Training



LIP hosts over 50 PhD and master students

 LIP coordinates two PhD programes and is part of several European networks

- Flagship program: LIP Summer Internship Programme
- Schools and workshops

Education and Outreach

ECO activities are part of our social role and fundamental for the recognition of an institution's work



- CERN's Portuguese Language Teachers Programmes
- International Masterclasses in Particle Physics
- Summer internships for high-school students
- LIP-EduLab, partnership with several schools
- Public sessions and Seminars in schools
- Close partner of Agência Ciência Viva and SPF

