LIP Glossary

AGN - Active Galactic Nucleus

ALICE - LHC experiment

AMS - Alpha Magnetic Spectrometer (particle physics experiment in the ISS)

AEEF - Alphasat Environment and Effects Facility (ESA)

AHEAD - Integrated Activities for the High Energy Astrophysics Domain (H2020)

AI - Artificial intelligence

Alphasat - the largest European telecom satellite (ESA)

AMBER - Apparatus for Meson and Baryon Experimental (CERN)

AMEGO - All-sky Medium Energy Gamma-ray Observatory (NASA)

ANI - National Innovation Agency (Agência Nacional de Inovação)

ANIMEE - Associação Portuguesa das Empresas do Sector Elétrico e Eletrónico

APPEC - Astroparticle Physics European Consortium

ASIC - Application Specific Integrated Circuit

AT - Advanced Training

ATLAS - A Toroidal LHC ApparatuS (general-purpose experiment at the LHC

Auger - Pierre Auger Observatory (Argentina)

BEXUS - Balloon Experiments for University Students

BIN - Brain Imaging Network

biodata.pt - Portuguese distributed e-infrastructure for biological data

BioISI - Instituto de Biossistemas e Ciências Integrativas

BTL - Barrel Timing Layer (CMS)

BSM - Beyond the Standard Model

CBPF - Brazilian Centre for Research in Physics (Centro Brasileiro de Pesquisas Físicas)

CC - Competence Centre

CCMC - Monitoring and Control Competence Centre (LIP)

CEFITEC - Centre for Physics and Technological Research, NOVA (Centro de Física e Investigação Tecnológica)

CENTRA - Centre for Astrophysics and Gravitation

CERN- European Laboratory for Particle Physics, Geneva, Switzerland

CFTC - Centre for Theoretical and Computational Physics, FCUL (Centro de Física Teórica e Computacional)

CFTP - Centre for Theoretical Particle Physics, IST (Centro de Física Teórica de Partículas)

CHUC - Coimbra University Hospital Center (Centro Hospitalar e Universitário de Coimbra)

COMPASS - Common Muon and Proton Apparatus for Structure and spectroscopy (CERN experiment)

CMS - Compact Muon Solenoid (general-purpose experiment at the LHC)

CNAO - National Centre for Oncological Hadrontherapy, Italy (Centro Nazionale Adroterapia Oncologica)

CNC - Computer Numerical Control (refers to computer controlled machine or tool)

CNES - French Space Agency (Centre National d'Études Spatulas)

CoastNet - Portuguese Coastal Monitoring Network

COVID-19 - Disease caused by the coronavirus SARS-CoV-2

CP - Charge Parity (symmetry)

CPCA - FCT Call for Advanced Computing Projects (2020)

Copernicus - Satellite-based European Union's Earth Observation Programme

CR - Cosmic Rays

CS -Control System

CTA - Cherenkov Telescope Array

CTN - Nuclear Technology Campus, IST (Campus Tecnológico e Nuclear)

CTTB - Component Technology Test Bed

CV - Agência Ciência Viva

DAQ - Data Acquisition System

DCS - Detector Control System

DBD - Double Beta Decay

DELPHI - Detector with Electron, Photons and Hadron Identification, experiment at LEP (CERN)

DIAS - Data and Information Access Services

DIS - Deep Inelastic scattering

DL - Detectors Laboratory (LIP)

DQM - Data Quality Manager

DUNE - Deep Underground Neutrino Experiment (CERN/FermiLab)

EC - European Council

ECAL - Electromagnetic Calorimeter (CMS)

ECFA - European Committee for Future Accelerators

ECO - Education, Communication and Outreach

ECOTOP - Ecology and Conservation of Top Predators group (MARE)

eCRLab - Cosmic Rays Electronics Laboratory (LIP)

EEE - Electronic and Electric Engineering

EFACEC - Portuguese company, operating in the energy and transportation sector

EGI - European Grid Infrastructure

EGI-ACE - European Open Science Cloud implementation project

EOSC - European Open Science Cloud

EPPCN - European Particle Physics Outreach Network

ERC - European Research Council

ESA - European Space Agency

ESFRI - European Strategy Forum on Research Infrastructures

ESPP - European Strategy for Particle Physics

ESPPU - European Strategy for Particle Physics Update

ESS - European Spallation Source

EU - European Union

EUDAT-CDI - European Collaborative Data Infrastructure

EURATOM - European Atomic Energy Community

EuroCC - H2020 EU project for HPC coordination

EuroHPC - European High Performance Computing Joint Undertaking

eV - electron-Volt (unit of energy; the energy of an electron under 1 Volt; multiples are: keV, MeV, GeV, TeV, PeV, EeV)

EVOLEO - Portuguese company, operating in the electronic engineering sector

FAIR - Principles for Findability, Accessibility, Interoperability, and Reuse of digital assets

FAIR - Facility for Antiproton and Ion Research (GSI)

FARE - Fake News and Real People (ERC project at LIP)

FCC - Future Circular Collider

FAPESP - Fundação de Amparo à Pesquisa do Estado de São Paulo

FCCN - Fundação para o Cálculo Científico Nacional (FCT)

FCT - Foundation for Science and Technology, Portugal (Fundação para a Ciência e a Tecnologia)

FCUL - Faculdade de Ciências, Universidade de Lisboa

Fermilab - Fermi National Accelerator Laboratory, Illinois, USA

FD - Fluorescence Detector (in Auger)

FOV - Field of View

FPGA - Field-programmable gate array (integrated circuit)

GBIF - Global Biodiversity Network

GHIPOFG - Portuguese Institute of Oncology (Grupo Hospitalar Instituto Português de Oncologia Francisco Gentil)

GEO - Geostationary orbit

GPU - Graphics processing unit

GRB - Gamma-Ray Burst

GRD - Ground (electricity)

GSI - Helmholtz Centre for heavy ion research, in Darmstadt, Germany

GSTP - General Support Technology Programme, ESA

HEP - High Energy Physics (or Particle Physics)

HiRezBrainPET - Project for Brain imaging by high resolution PET (LIP participation)

HL-LHC - High-Luminosity LHC

Horizon 2020 - EC Framework Program for Research & Innovation 2014-2020

HADES - High Acceptance Di-Electron Spectrometer (experiment at GSI)

Horizon Europe - EC Framework Program for Research & Innovation 2021-2027

HPC - High Performance Computing

HR - Human Resources

HTC - High Throughput Computing

HV - High Voltage

Hyper-K - Hyper-Kamiokande (planned neutrino physics experiment in Japan)

IBEB - Institute for Biophysics and Biomedical Engineering, FCUL

IBERGRID - Iberian Computing Grid Infrastructure

ICNAS - Institute for Nuclear Sciences Applied to Health (Instituto de Ciências Nucleares Aplicadas à Saúde)

ICT - Information and Communications Technologies

IDPASC - International Doctorate Network on Particle Physics, Astrophysics and Cosmology

INAF - Istituto Nazionale di Astrofisica (Italy)

IGC - Instituto Gulbenkian de Ciência

ILO - Industrial Liaisons Officer

IMEM - Istituto dei Materiali per l'Elettronica e il Magnetismo (Parma, Italy)

INCD - National Infrastructure for Distributed Computing (Infraestrutura Nacional de Computação Distribuída)

INCoDe2030 - National Initiative for Digital Competences, Portugal, (Iniciativa Nacional de Competências Digitais)

INESC - Institute for Systems and Computer Engineering (Instituto de Engenharia de Sistemas e Computadores)

INFN - Istituto Nazionale di Fisica Nucleare (Italy)

INTERFACE - Portuguese government programme for KT and business innovation

IPC - Instituto Politécnico de Coimbra

IPPOG - International Particle Physics Outreach Collaboration

ISS - International Space Station

IST - Instituto Superior Técnico, Universidade de Lisboa

IT - Information Technologies

ITN - Innovative Training Networks, a EU Marie Skłodowska-Curie action

ITQB - Instituto de Tecnologia Química e Biológica (NOVA)

JUICE - Jupiter Icy Moons Explorer (ESA)

KT - Knowledge Transfer

LAr - Liquid argon

LEO - Low Earth Orbit

LEP - Large electron positron collider (past CERN accelerator)

LCRM - Low-Cost Radiation Monitor

LHC - Large Hadron Collider (at CERN)

LHCb - LHC experiment

LHCC - LHC experiments Committee

LIP - Laboratory for Instrumentation and Particle Physics

LNEC - Laboratório Nacional de Engenharia Civil

LOMaC - Laboratório de Óptica e Materiais Cintilantes (Optics and Scintillating materials lab)

LUX - Large Underground Xenon (dark matter experiment, at SURF)

LXe - Liquid xenon

LZ - Dark Matter experiment at SURF (merge of LUX and ZEPLIN experiments)

MACC - Minho Advanced Computing Centre

MARE - Marine and Environmental Sciences Centre

MarsREM - Mars Radiation Environment Models

MFS - MultiFunctional Spectrometer

MIT - Massachusetts Institute of Technology, USA

MIP - Minimum Ionizing Particle

ML - Machine Learning

MoU - Memorandum of Understanding

MSc - 'Master of Science' (M.Sc.) degree

MW - Mechanical Workshop (LIP)

M&O - Maintenance and Operations

NA38 - CERN SPS experiment

NA50 - CERN SPS experiment

NASA - National Aeronautics and Space Administration (USA)

NDBD - Neutrinoless Double Beta Decay

NEI - European Researchers Night (Noite Europeia dos Investigadores)

NEXT - Neutrino Experiment with a Xenon TPC

NOVA - Universidade Nova de Lisboa

NOVA SBE - School of Business and Economics at Universidade Nova de Lisboa

NPstrong - Nuclear Physics and strong interactions (LIP)

NREN - National Research and Educational Network

NP - New Physics

NUC-RIA - Nuclear reactions and Astrophysics experimental group (LIP)

O-PGI - Orthogonal Prompt-Gamma Imaging

OR-imaging - Ortogonal Ray imaging

Ortho-CT - Orthogonal Computer Tomography

PANDA - experiment at FAIR, GSI

PCB - Printed Circuit Board

PERIN - Portugal-Europe R&I Network (ANI)

PET - Positron Emission Tomography

PhD - 'Doctor of Philosophy' (Ph.D.) degree

Pheno - Phenomenology group (LIP)

PI - Principal Investigator

PIPS - Portuguese Interplanetary Particle Surveyor (ESA contract for Mercury mission)

PORBIOTA - Portuguese Infrastructure for Information and Research on Biodiversity

ProtoDUNE - Prototype of the DUNE detector, installed at CERN

PPS - Precision Proton Spectrometer

PQCD - Partons and QCD (LIP)

ProtoTera - Association for Proton Therapy and Advanced Technologies for the Prevention and Treatment of Cancer

PS - Proton Synchrotron (CERN)

PT Space - Portuguese Space Agency

QCD - Quantum Chromodynamics

QED - Quantum Electrodynamics

QGP - Quark Gluon Plasma

R3B - Reactions with Relativistic Radioactive Beams (GSI experiment)

RADEM - RADiation hard Electron Monitor for ESA's JUICE mission

RD51 - CERN collaboration of detector R&D

RICA - Iberian Network for Advanced Computing (Rede Ibérica de Computação Avançada)

RICH - Ring Imaging Cherenkov detector

RIS3 - Research and Innovation Strategy for Smart Specialisation

RNCA - National Network for Advanced Computing (Rede Nacional de Computação Avançada)

RPC - Resistive Plate Chamber (gaseous detector)

RPC-TOF-FD - RPC TOF Forward Detector (HADES)

RPC-TOF-W - RPC TOF Wall (HADES)

R&D - Research and Development

R&I - Research and Innovation

SARS - Severe Acute Respiratory Syndrome

SciCom - Science Communication

SD - Surface Detector (in Auger)

SHiP - Search for Hidden Particles (CERN)

SLB - Synchronization Link Board (CMS ECAL)

SM - Standard Model (of particle physics)

SND - Scattering and Neutrino Detector (SHiP)

SNO+ - Sudbury Neutrino Observatory, at SNOLAB. SNO+ is the successor of SNO

SNOLAB - Underground science laboratory, Ontario, Canada
SPAC - Social Physics and Complexity (LIP)
SPENVIS - Space Environment Information System (ESA)
SPF - Portuguese Physical Society
SPS - Super Proton Synchrotron
STEM - Science, Technology, Engineering and Mathematics
SURF - Sanford Underground Research Facility (USA)
SWGO - Southern Wide-field Gamma-ray Observatory
TA - Telescope Array
TACC - Texas Advanced Computing Center
TagusLIP - LIP laboratory at the Tagus Park business campus
TDAQ - Trigger and Data Acquisition System
TileCal - ATLAS Tile Calorimeter (ATLAS hadron calorimeter)
ToF - Time-of-Flight
TOF - Time-of-Flight
TPC - Time Projection Chamber (detector)
TRISTAN - name of a specific RPC-based detector
TT - Technology transfer
UC - Universidade de Coimbra
ULisboa - Universidade de Lisboa
UM - Universidade do Minho
WLCG - Worldwide LHC Computing Grid
WLS - Wavelength Shifter (referring to optical fibres)
ZEPLIN - Zoned Proportional scintillation in Liquid Noble gases, series of dark matter experiments (UK)