

Acronyms

ACHIP Accelerator on a Chip.

AD Antiproton Deaccelerator.

Ad S Anti-de Sitter space time.

ADS Accelerator Driven Subcritical.

ALP Axion Like Particle.

AMS-02 Alpha Magnetic Spectrometer (on the ISS).

ANITA Antarctic Impulsive Transient Antenna.

ANTARES Astronomy with a Neutrino Telescope and Abyss environmental RESearch.

APPEC Astroparticle Physics European Consortium.

ARIES Accelerator Research and Innovation for European Science and Society.

ASIC Application-Specific Integrated Circuits.

ATLAS A Toroidal LHC Apparatus (LHC Experiment).

BASE Baryon Antibaryon Symmetry Experiment.

BBH Binary Black Hole.

BDF Beam Dump Facility.

BH Black Hole.

BNS Binary Neutron Star.

BSM Beyond the Standard Model.

CCD Charge-Coupled Device.

CDR Critical Design Review.

CE Cosmic Explorer.

CEPC Circular Electron Positron Collider in China.

CERN European Organisation for Nuclear Research.

CFT Conformal Field Theory.

CHAPS College of Helvetic Astronomy Professors.

CHART Swiss Accelerator Research and Technology.

CHIPP Swiss Institute of Particle Physics.

CHRISP Swiss Research Infrastructure for Particle Physics.

cLFV Charged Lepton Flavour Violating reaction.

CLIC Compact Linear Collider.

CMB Cosmic Microwave Background.

CMS Compact Muon Solenoid (LHC Experiment).

CMSA Chinese Manned Space Agency.

CP Charge-conjugation and Parity symmetry.

CPT Charge-conjugation Parity and Time symmetry.

CPU Central Processing Unit.

CREMA Charge Radius Experiments with Muonic Atoms.

CSCS Swiss National Supercomputing Centre.

CTA Cherenkov Telescope Array.

CTAO CTA Observatory.

DAMIC Dark matter in CCDs (experiment at SNOLAB).

DAMIC-M Dark matter in CCDs experiment at Modane (experiment at Laboratoire Souterrain de Modane, France).

DAMPE Dark Matter Particle Explorer (space telescope).

DAQ Data Acquisition.

DARWIN Dark Matter Wimp Search with Liquid Xenon (planned experiment at LNGS, Italy).

DM Dark Matter.

DS Dark Sector.

DUNE Deep Underground Neutrino Experiment.

EAS Extensive Air Showers.

EC European Commission.

ECFA European Committee for Future Accelerators.

EDM Electron Electric Dipole Moment.

EFT Effective Field Theories.

ELENA Extra Low Energy Antiproton ring.

EPFL École Polytechnique Fédérale de Lausanne.

EPPCN European Particle Physics Communication Network.

EPS-AG Accelerator Group of the European Physical Society.

ERC European Research Council.

ERIC European Research Infrastructure Consortium.

ESA European Space Agency.

ESFRI European Strategy Forum on Research Infrastructures.

ESO European Southern Observatory.

ESPP European Strategy for Particle Physics.

ESRF European Synchrotron Radiation Facility.

ESS European Spallation Source.

ET Einstein Telescope.

ETHZ Eidgenössisch Technische Hochschule Zürich.

EUSO Extreme Universe Space Observatory.

eV Electron Volts.

eXTP Enhanced X-ray Timing and Polarimetry.

FACT First g-Apd Cherenkov Telescope.

FASER Forward Search Experiment at the LHC.

FCC Future Circular Collider at CERN.

FCC-ee Future Circular Collider, colliding electrons and positrons.

FCC-ep Future Circular Collider, colliding electrons and protons.

FCC-hh Future Circular Collider, colliding hadrons.

FLARE Funding Large international Research projects.

FPF Forward Physics Facility.

FPGA Field-Programmable Gate Array.

G-APD Geiger Mode Avalanche Photodiodes.

GBAR Gravitational Behaviour of Antimatter at Rest.

GERDA Germanium Detector Array (Experiment at LNGS).

GPU Graphics Processing Unit.

GRB Gamma Ray Burst.

GW Gravitational Wave.

H.E.S.S. High Energy Stereoscopic System (telescope in Namibia).

HEP High-Energy Physics.

HERD High-Energy Cosmic Radiation Detection (on board of China's Space Station).

HEV High Energy Ventilator.

HIMB High-Intensity Muon Beam at PSI.

HIPA High-Intensity Accelerator complex at PSI.

HL High Luminosity.

HL-LHC High-Luminosity LHC.

HNL Heavy Neutral Leptons.

HPC High-Performance Computer.

HSF HEP Software Foundation.

HSSIP High-School Students Internship Programme.

HTS High-Temperature Superconductors.

Hyper-K HYPER-Kamiokande (Neutrino observatory near Kamioka, Japan).

ICFA International Committee for Future Accelerators.

ILC International Linear Collider.

ILL Institut Laue-Langevin in Grenoble.

INFN Istituto Nazionale di Fisica Nucleare.

INTEGRAL International Gamma-Ray Astrophysics Laboratory.

IPAC International Particle Accelerator Conference.

IPPOG International Particle Physics Outreach Group.

IR Infrared.

ISFEE Inertial Sensor Front End Electronics.

ISS International Space Station.

J-PARC Japan Proton Accelerator Research Complex.

JUNO Jiangmen Underground Neutrino Observatory.

K2K KEK to Kamioka (neutrino experiment in Japan).

KEKB Electron Positron collider (at KEK, Japan).

LANL Los Alamos National Laboratory.

LBNF Long-Baseline Neutrino Facility.

LBNL Lawrence Berkeley National Laboratory.

LDM Light Dark Matter.

LEGEND Large Enriched Germanium Experiment for Neutrinoless Double-Beta Decay (at LNGS, Italy).

LHAASO Large High Altitude Air Shower Observatory (in Sichuan province, China).

LHC Large Hadron Collider (at CERN).

LHCb Large Hadron Collider beauty (LHC experiment).

LHEP Laboratory for High-Energy Physics.

LIGO Laser Interferometer Gravitational-Wave Observatory.

LINAC Linear Accelerator.

LISA Laser Interferometer Space Antenna.

LNGS Laboratori Nazionali del Gran Sasso.

LS2(LS3) Long Shutdown 2(3) (of the LHC).

LSS Cosmological Large-Scale Structure.

LSST Vera C. Rubin Observatory Large Synoptic Survey Telescope.

LST Large-Size Telescope.

LXe Liquid Xenon.

MAGIC Major Atmospheric Gamma Imaging Cherenkov Telescopes (La Palma).

MEG $\mu \rightarrow e\gamma$ (Experiment at PSI).

MICE Muon Ionisation Cooling Experiment.

MicroBooNE Micro Booster Neutrino Experiment (experiment at Fermilab, USA).

ML Machine Learning.

MST Medium-Size Telescope.

mu-Mass Muonium Laser Spectroscopy (Experiment at PSI).

Mu3e $\mu \rightarrow eee$ (Experiment at PSI).

muX muX (Experiment at PSI).

N³LO Next to next to next to leading order.

NA64 North Area 64 (experiment at CERN SPS).

NASA National Aeronautics and Space Administration.

ND280 Near Detector of the T2K experiment.

nEDM/n2EDM Search for the Neutron Electric Dipole Moment (Experiment at PSI).

NIST National Institute of Standards and Technology (USA).

NLO Next to leading order.

NNLO Next to next to leading order.

NS Neutron Star.

NSF National Science Foundation.

NSSC National Space Science Center.

NuPECC Nuclear Physics European Collaboration Committee.

OPERA Oscillation Project with Emulsion Tracking Apparatus (neutrino experiment at LNGS, Italy).

OSCURA Observatory of Skipper CCDs Unveiling Recoiling Atoms.

PAN Penetrating particle ANalyzer.

PET Positron Emission Tomography.

PeV Peta Electron Volts.

piHe Pionic Helium.

PINGU Precision IceCube Next Generation Upgrade (dense inner detector of IceCube).

PMNS Pontecorvo-Maki-Nakagawa-Sakata.

POLAR-2 Detector for Gamma Ray Bursts Photon Polarisation Measurements (on the Chinese space station).

ppm parts per million.

PRODEX Programme de Développement d'Expériences scientifiques.

PSI Paul Scherrer Institute.

QCD Quantum Chromodynamics.

QED Quantum Electrodynamics.

QFT Quantum Field Theory.

R&D Research & Development.

RAL Rutherford Appleton Laboratory (near Oxfordshire, GB).

RF Radio Frequency.

RI Research Infrastructure.

RRB Resource Review Board.

SATW Swiss Academy of Engineering Sciences.

SBN Short Baseline Near detector.

SciFi Scintillating Fibre.

SCNAT Swiss Academy of Natural Sciences.

SENSEI Sub-Electron-Noise SKIPPER-CCD Experimental Instrument.

SERI State Secretariat for Education, Research, and Innovation.

SESAME Synchrotron-light for Experimental Science and Applications in the Middle East.

SHiP Search for Hidden Particles (proposed experiment).

SKA Square Kilometre Array.

SLS Swiss Light Source.

SM Standard Model.

SMUS Swiss Muon Source.

SND Scattering and Neutrino Detector.

SNOLAB Underground Science Laboratory (near Sudbury, Ontario, Canada).

SNS Spallation Neutron Source.

SNSF Swiss National Science Foundation.

SOC System on Chip.

SPS Super Proton Synchrotron.

SSO Swiss Space Office.

SST Small-Size Telescope.

STEM Science, Technology, Engineering, and Mathematics.

STK Silicon-Tungsten Tracker.

SUSY Supersymmetry.

SWISSFEL Swiss Free Electron Laser.

T2K Tokai to Kamioka (neutrino experiment in Japan).

TDR Technical Design Report.

TeV Tera Electron Volts.

TPC Time Projection Chamber.

TRIUMF Canada's National Laboratory for Particle and Nuclear Physics (formerly an acronym: Tri-University Meson Facility).

UCN UltraCold Neutrons.

UHECR Ultra-High-Energy Cosmic Rays.

UV Ultraviolet.

VERITAS Very Energetic Radiation Imaging Telescope Array System.

WIMP Weakly Interacting Massive Particle.

WLCG Worldwide LHC Computing Grid.

XFEL X-ray Free Electron Laser.