Acronyms and Abbreviations

ADC  analog digital converter
ADMX  Axion Dark Matter eXperiment, USA
AGB  asymptotic giant branch
AGS  alternating gradient synchrotron
ALP  axion-like particle
BBN  big bang nucleosynthesis
BFRT  Brookhaven-Fermilab-Rochester-Trieste
BNL  Brookhaven National Laboratory, USA
BR  branching ratio
BSMM  beyond the SM model
CAST  CERN Axion Solar Telescope, CERN Geneva
CCD  charge coupled device
CDM  cold dark matter
CKM  Cabbibo-Kobayashi-Maskawa
CKT  Csáki-Kaloper-Terning
CL  confidence level
CMB  cosmic microwave background
CMBR  cosmic microwave background radiation
CMD  cryogenic magnetic detector
CME  Cotton-Mouton effect
COBE  Cosmic Background Explorer, NASA
COMPASS  Common Muon Proton Apparatus for Structure and Spectroscopy, CERN Geneva
CP  charge conjugation transformation followed by parity transformation
DAMA  Dark Matter Experiment, Laboratori Nationali del Gran Sasso, Italy
DAQ  data acquisition
DFSZ  Dine-Fischler-Schrednicki-Zhitnisky
DM  dark matter
DRIFT  Directional Recoil Identification From Tracks, Boulby Underground Laboratory, UK
EDM  electric dipole moment
EoS  equation of state
FCNC  flavour changing neutral current
FET  field-effect transistor
FFT  fast Fourier transform
FIRAS  Far Infrared Absolute Spectrophotometer, NASA
FP  Fabry-Pérot
GECOSAX  Geomagnetic Conversion of Solar Axions
HEP  high energy physics
HERA  Hadron-Electron Ring Accelerator Facility, DESY Hamburg
HERMES  HERA measurement of spin, DESY Hamburg
HFET  heterostructure field-effect transistor
IF  intermediate frequency
IGM  intergalactic medium
ILC  International Linear Collider
ILIAS  Integrated Large Infrastructures for Astroparticle Science
INFN  Istituto Nazionale di Fisica Nucleare, Italy
KEK  National Laboratory for High Energy Physics, Japan
KSVZ  Kim-Shifman-Vainshtein-Zakharov
LHC  Large Hadron Collider, CERN Geneva
LHe  liquid helium
LHS  left hand side
LLNL  Lawrence Livermore National Laboratory, USA
LOI  letter of intent
MDM  magnetic dipole moment
MICROMEGAS  Micromesh Gaseous Structure
NRAO  National Radio Astronomy Observatory, USA
OSQAR  Optical search for QED vacuum magnetic birefringence, Axions and photon regeneration; CERN Geneva
P  parity transformation
PAC  program advisory committee
PQ  Peccei-Quinn
pQCD  Perturbative Quantum Chromodynamics
PVLAS  Polarizzazione del Vuoto con Laser, INFN, Italy
QCD  quantum chromodynamics
QED  quantum electrodynamics
QM  quantum mechanics
QSO  quasi stellar object – quasar
QWP  quarter-wave-plate
RGB  red giant branch
RHS  right hand side
RXTE  Rossi X-ray Timing Explorer
SM  standard model
SN  supernova
SNOC  SuperNova Observation Calculator
SNR  signal to noise ratio
SNS  spallation neutron source
SOLAX Solar Axion Experiment, Sierra Grande, Argentinia
SOM  stress optical modulator
SQUID superconducting quantum interference devices
SREDM Storage Ring EDM collaboration
SSB spontaneous symmetry breaking
SSM standard solar model
SUSY supersymmetry
T time reversal transformation
TE transverse electric
TES transition edge sensor
TM transverse magnetic
TPC time projection chamber
UCN ultra cold neutron
VEV vacuum expectation value
WIMP weakly interacting massive particle
WMAP Wilkinson Microwave Anisotropy probe
XIS X-ray Imaging Spectrometer
AGB stars, 59
ALPs, 85–91
  Dark matter, 90–91
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