

Acronyms

An effort is made in this volume to avoid excessive use of acronyms. However, when appropriate we follow the use in original articles of the following universally recognized abbreviations which have acquired proper name character.

Laboratories

BNL	Brookhaven National Laboratory, Long Island, New York
CERN	Derived from French language, <i>Conseil Européen pour la Recherche Nucléaire</i> , and maintained as the proper name for the <i>International Particle Physics Laboratory</i> located across French-Swiss Border near to Geneva
Dubna	International laboratory in Russia named after the location, providing beams of near relativistic heavy ions
GSI	German acronym for “Gesellschaft für Schwerionenforschung”, translates as Center for Heavy Ion Research, at Darmstadt suburb Wixhausen close to Frankfurt
LBNL	Lawrence Berkeley National Laboratory; earlier name LBL
LPI	(Moscow) Lebedev Physical Institute

Accelerators, Experiments

AFS	Axial Field Spectrometer, an ISR experimental area 1977–1982
AGS	Alternate Gradient Synchrotron, used today as injector for RHIC at BNL, formerly a fixed target relativistic heavy ion source
ALICE	LHC experiment dedicated to study of QGP
Bevalac	Two accelerators at LBL connected with transfer line, delivering a beam of near relativistic heavy ions at LBL
ISR	Intersecting Storage Ring, the first hadron collider ever built, located at CERN
LEP	Large Electron–Positron collider was housed in the same tunnel as the LHC today
LHC	Large Hadron Collider
NAxy	NA refers to the experimental ‘North Area’ located in France, formerly the CERN-II campus, while ‘xy’ is a sequential number like 35, 49, 61, etc.

PS	Proton Synchrotron, the first high energy particle accelerator at CERN, served as injector to ISR, remains the injector of SPS and thus LHC
PHENIX	One of two ‘large’ experiments at RHIC, see also STAR
RHIC	Relativistic Heavy Ion Collider
SPS	Super Proton Synchrotron, an accelerator ring used today mainly as injector to LHC, but still providing heavy ion beams for fixed target experiments
STAR	One of two ‘large’ experiments at RHIC, see also PHENIX
WAXy	WA refers to the main CERN campus experimental ‘West Area’ while xy is sequential number like 85, 94, 97, etc.

Scientific Abbreviations

AA	Nucleus–nucleus, used as in ‘heavy ion collision’ between nuclei of nucleon number A
BE	Bootstrap Equation
BES	Beam energy scan: RHIC experimental program where RHI collisions in a wide energy range are explored, reaching to lowest accessible energy
BeV	Old for ‘GeV’ when a ‘billion’ was used in sense of ‘giga’
CM	Center of mass or, in relativistic context, center of momentum
fm	10^{-15} meter named after Enrico Fermi, nearly the radius of the proton
GeV	Giga (10^9) electron Volt, a particle physics unit of energy about 1.07 times energy equivalent of the proton mass
HG	Hadron gas: same as HRG, often used in this simplified name form
HRG	Hadron (also, equivalently, Hagedorn) resonance gas
LQCD	Lattice-QCD as in numerical solution of QCD represented on a lattice space-time
MeV	Mega (10^6) electron Volt, there are a 1,000 MeV in a GeV, see above
pA	Proton–nucleus, used as in ‘collision’ with a nucleus of nucleon number A
pp	Proton–proton, used as in ‘collision between’
RHI	Relativistic heavy ion—typically ‘collisions’, distinct from RHIC, the collider
QCD	Quantum chromo-dynamics
SBM	Statistical Bootstrap Model
QGP	Quark-gluon plasma
SHM	Statistical Hadronization Model
T_H	Hagedorn temperature, T_0 in Hagedorn’s and other contemporary work

Other Abbreviations

DG	The CERN Director General is often referred to as ‘DG’
SPIRES	‘Stanford Physics Information Retrieval System’; bibliographic data base about literature in the field of HEP (High Energy Physics) and related areas, originating at SLAC (Stanford Linear Accelerator Center)