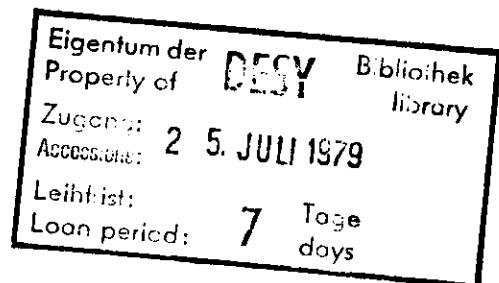


Internal Report
DESY L-79/o1
June 1979

The HIGH ENERGY PHYSICS INDEX Keywords 1979





The HIGH ENERGY PHYSICS INDEX Keywords 1979

The terms in this keyword list are used by the DESY documentation service for the indexing of papers on high-energy physics, quantum field theory and accelerator technology.

1. Purpose of Keyword Assignment

Our keywords serve the following purposes:

they allow the establishment of a subject index for the biweekly periodical HIGH ENERGY PHYSICS INDEX,

they make possible mechanized information retrieval and SDI (Selective Dissemination of Information) service at DESY and other high-energy physics centers.

The total keywords assigned to a paper may also be of some use as a sort of abstract.

2. Form of Keyword Assignment

Keywords may be used singly or coupled by comma and blank (examples: FIELD THEORY (single) and FIELD THEORY, NONABELIAN (coupled)). While the first term is generally a regular keyword, the second term may be a keyword or a non-keyword. Regular keywords are shown in this list ordered by subject (page III) and ordered alphabetically (page 1).

Non-keywords which are frequently used are standardized; they are contained in the alphabetical list.

3. Two-Particle Combination

Most of the combinations of any two particles (but not all) in the list are single regular keywords. The particle coming first in the following table should mostly come first in the combination.

(example: PHOTON NEUTRINO is a keyword, but NEUTRINO PHOTON is not a keyword. Combinations of this type may occur in expressions like PHOTON NEUTRINO, ELASTIC SCATTERING)

PHOTON	K	ANTILAMBDA
LEPTON	ANTI-K	SIGMA
FERMION	KØ	ANTISIGMA
NEUTRINO	K+	SIGMA+
ANTINEUTRINO	K-	SIGMAØ
ELECTRON	MESON RESONANCE	SIGMA-
POSITRON	BARYON	XI
MUON	ANTIBARYON	ANTIXI
MUON+	NUCLEON	XIØ
MUON-	ANTINUCLEON	XI-
HADRON	ANTI-P	OMEGA-
MESON	P	VECTOR MESON
BOSON	N	BARYON RESONANCE
PI	ANTI-N	DEUTERON
PIØ	HYPERON	LIGHT NUCLEUS
PI+	ANTIHYPERON	NUCLEUS
PI-	LAMBDA	QUARK
		INTERMEDIATE BOSON

4. Reaction Equations

Reactions of two particles or decay modes are given as in the following examples:

ANTI-P P --> K \emptyset K- PI+
P P --> P ANYTHING
DELTA(1236) \emptyset --> P PI-
ANTI-P P --> DELTA(1236) \emptyset (P PI-) PI+ PI- (+)

Particles on the left-hand side are arranged in the order of beam and target, particles on the right-hand side are arranged in the order of falling masses, in case of same masses in the order positive charge - negative charge.

5. Other Particle Combinations

Three-particle combinations (non-keywords) succeeding keywords like VERTEX FUNCTION or COUPLING CONSTANT or INTERFERENCE are listed in the order of rising masses (example: COUPLING CONSTANT, MESON NUCLEON NUCLEON). Final or intermediate states are also given if they are of importance; here the particles are listed in parentheses in the order of falling masses (examples: FINAL STATE, (NUCLEON 2PI); MASS SPECTRUM, (PI+ PI- PI \emptyset)).

6. Resonances

Meson and baryon resonances are generally named as in the Particle Data Group Tables; charge states are indicated only for the rho(765) and the Delta(1236).

7. Depth of Indexing

Papers on peripheral topics will usually have fewer keywords per paper than papers on high-energy physics. Examples of peripheral topics are quantum mechanics, statistical mechanics, gravitation, astrophysics, and nuclear physics with energy above 100 MeV/nucleon.

8. Alphabetical Keyword List

There are three kinds of entries in the alphabetical list:

regular keywords (boldface and blank space in Column 1)

standardized non-keywords ("*" in Column 1); these terms will generally occur as companions to regular keywords. There are also non-keywords which have not been standardized; they are not contained in this keyword list

terms which are not used ("—" in Column 1).

Comments or rules of use are given in parentheses. "Restricted use" means that a keyword is used only in cases where it is of central importance in the paper considered.

Entries are ordered in the IBM sorting sequence:

blank.(+*);-/,<>:'A...Z 0...9

+)¹⁾ The decay products of the DELTA(1236) are given in parentheses (cf. the previous equation).

KEYWORDS BY SUBJECT

This list contains only the regular keywords. Large-caps headings and terms in parentheses are not keywords.
For standardized non-keywords the alphabetical list should be consulted.

PARTICLES	(meson resonances)	Lambda(1815) Lambda(1830) Lambda(2100) Lambda(2350) Lambda(2585) Sigma(1385) Sigma(1670) Sigma(1750) Sigma(1765) Sigma(1915) Sigma(1940) Sigma(2030) Sigma(2250) Sigma(2455) Sigma(2620) Xi(1530) Xi(1820) Xi(1940)	PARTICLE PROPERTIES
photon	eta(549) rho(765) rho(765)+ rho(765)- rho(765)ø	charge electric moment isospin magnetic moment mass mass difference mass ratio parity quantum number spin helicity polarization strangeness	
(leptons)	neutrino neutrino/e/ neutrino/mu/ neutrino/tau/ neutrino/L/ antineutrino antineutrino/e/ antineutrino/mu/ antineutrino/tau/ antineutrino/L/	omega(784) eta(958) delta(970) S*(1000) phi(1019) A1(1070) epsilon(1200) B(1235) f(1260) D(1285) A2(1310) E(1422) f(1514) F1(1540) rho(1600) omega(1675) g(1680) rho(1710) h(2050) K*(892) L(1770) D*(2010) D** F* F** psi mesons X(2800) J/psi(3100) chi(3410) chi/PC(3510) chi(3550) psi(3700) psi(3770) psi(4100)structure psi(4400) upsilon mesons upsilon(9500) upsilon(10000) upsilon(10400)	
muon	muon+ muon-		
tau		(other keywords)	
(mesons)		particle antiparticle charged particle positive particle negative particle neutral particle new particle postulated particle search for mass enhancement	
pi	pi+ pi- piø	fermion antifermion	
K	K+ K- Kø Kø(L) Kø(S) anti-K anti-Kø	boson intermediate boson	
D	D+ D- Dø anti-D anti-Dø	lepton antilepton heavy lepton	
F	anti-F	hadron meson	
(nucleons)		meson resonance axial-vector meson pseudoscalar meson scalar meson tensor meson vector meson	
p	anti-p	baryon antibaryon nucleon antinucleon	
n	anti-n	hyperon antihyperon nucleon resonance	
(hyperons)		strange particle	
Lambda		charmed particle charmed meson charmed baryon	
Antilambda		colored particle	
Sigma		quark antiquark	
Sigma+		gluon	
Sigma-		nucleus excited nucleus	
Sigmaø		hyperfragment	
Antisigma		light nucleus	
Antisigma+		deuterium	
Antisigma-		deuteron	
Antisigmaø		tritium	
Xi		atom positronium	
Xi-		(for two-particle combinations, see individual lists)	
Xiø			
Antixi			
Antixi-			
Antixiø			
Omega-			
Antiomega-			
(charmed baryons)			
Lambda/c(2260)	Lambda(1405)		
Sigma/c(2430)	Lambda(1520) Lambda(1670) Lambda(1690)		

beam emittance		astrophysics	minerals
beam focusing		atomic physics	<u>molecular biology</u>
beam instability		binding energy	
beam loading		bound state	
beam loss		correction	
beam monitoring		correlation	
beam optics		angular correlation	
beam oscillation		correlation function	
betatron oscillation		cosmic radiation	MATERIALS
synchotron oscillation		cross section	
beam transport		channel cross section	alloy
bunching		differential cross section	ceramics
ejection		total cross section	concrete
luminosity		current	crystal
orbit		density	gas
particle separator		dependence	glass
particle source		effect	liquid
(track measuring)		electricity	metal
bubble chamber		electromagnetic field	plastics
bubble chamber(hydrogen)		electric field	rubber
bubble chamber(deuterium)		magnetic field	semiconductor
bubble chamber(heavy liquid)		energy	solids
cloud chamber		energy levels	water
drift chamber		energy loss	
nuclear emulsion		excited state	
proportional chamber		final state	
spark chamber		form factor	
streamer chamber		flux	
hybrid system		fundamental constant	
tracks		forces	
track photography		interference	
counters and detectors		kinematics	
four-pi-detector		matter	
magnetic detector		antimatter	
spectrometer		mechanics	
magnetic spectrometer		moment	
hodoscope		momentum	
Cherenkov counter		longitudinal momentum	
ionization chamber		transverse momentum	
liquid argon detector		momentum transfer	
scintillation counter		optics	
semiconductor detector		perturbation theory	
shower detector		plasma	
solid-state counter		potential	
total-absorption counter		quantum mechanics	
(electronics and computers)		radiation	
analog circuit		secondary radiation	
analog logic		radiation length	
analog-to-digital converter		relativity theory	
CAMAG system		resonance	
computer		showers	
digital logic		spectra	
fast logic		mass spectrum	
interface		momentum spectrum	
microprocessor		temperature	
preprocessing		thermodynamics	
programming		threshold	
(data analysis)		OTHER FIELDS	
data analysis method		<u>mathematics</u>	
amplitude analysis		algebra	
multidimensional analysis		approximation	
partial wave analysis		functional analysis	
statistical analysis		group theory	
particle identification		mathematical methods	
track data analysis		numerical mathematics	
(other keywords)		statistics	
alignment		transformation	
background			
calibration			
coil			
control system			
feedback			
magnet			
pulsed magnet			
quadrupole lens			
measurement			
monitoring			
power supply			
RF system			
microwaves			
secondary radiation			
shielding			
target			
vacuum system			
THEORY OF PARTICLES AND FIELDS			
<u>field theory</u>			
axiomatic field theory			
dual field theory			
gauge field theory			
quantum chromodynamics			
quantum electrodynamics			
quantum flavor dynamics			
Reggeon field theory			
unified field theory			
Bethe-Salpeter equation			
expansion 1/N			
Feynman graph			
field equations			
field theoretical model			
light cone behaviour			
propagator			
quantization			
renormalization			
renormalization group			
scaling			
<u>theory of elementary particles</u>			
bootstrap			
current algebra			
dispersion relations			
duality			
model			
Regge poles			
Regge cut			
pomeron			
spectral representation			
Mandelstam representation			
symmetry			
hadron spectroscopy			
mass formula			
multiplet			
symmetry breaking			
unitarity			
(other keywords)			
conservation law			
coupling			
coupling constant			
invariance			
n-point function			
partial wave			
S-matrix			
scattering amplitude			
scattering length			
selection rule			
spinor			
sum rule			
vertex function			
violation			
NUCLEAR PHYSICS			
charge distribution			
fission			
electrofission			
photofission			
fusion			
nuclear physics			
nuclear properties			
nuclear matter			
nuclear model			
nuclear force			
nuclear reaction			
radioactivity			
GENERAL PHYSICS			
angular distribution			
angular momentum			
<u>chemistry</u>			
chemicals			
compounds			
inorganic compounds			
organic compounds			

1.874

A

*ABC (ENHANCEMENT, ABC)
-ABELIAN FIELD THEORY (USE 'FIELD THEORY')
ABERRATION
*ABEST (MODEL, ABEST)
ABSORPTION
-ABSORPTIVE CORRECTION ('CORRECTION,
ABSORPTION'; USED ONLY FOR EXPERIMENTAL
CORRECTIONS)
-ABSORPTIVE MODEL (MODEL, ABSORPTION)
*ABSORPTIVE PERIPHERAL (MODEL, ABSORPTIVE
PERIPHERAL)
-ABSTRACT ONLY (NOT USED AS A KEYWORD. APPEARS
BEHIND THE TITLE)
ACCELERATOR
*ACCEPTANCE ('COUNTERS AND DETECTORS,
ACCEPTANCE' OR 'ACCELERATOR, ACCEPTANCE')
*ACOUSTIC (SPARK CHAMBER, ACOUSTIC)
ACTINIUM
ACTION PRINCIPLE (SEE 'FIELD THEORY')
ACTION-AT-A-DISTANCE (AXIOMATIC FIELD THEORY)
ACTIVITY REPORT
-ADC (ANALOG-TO-DIGITAL CONVERTER)
-ADEMOLLI-GATTO THEOREM (SYMMETRY BREAKING)
*ADLER (SUM RULE, ADLER)
-ADLER CONDITION ('MODEL, PCAC' AND 'CURRENT
ALGEBRA')
-ADLER-HELL-GROSS-JACKIW (CURRENT ALGEBRA)
*ADLER-DASHEN-GEEL-MANN-FURINI (SUM RULE,
ADLER-DASHEN-GEEL-MANN-FURINI)
-ADLER-WEISBERGER RELATION ('MODEL, PCAC' AND
'CURRENT ALGEBRA')
*ADMIXTURE
*AEROGEL (CHERENKOV COUNTER, AEROGEL)
-AGS ACCELERATOR ('PROTON SYNCHROTRON'; FOR
EXPERIMENTAL RESULTS USE 'FREIBERGEN PS')
*AIR (SHOWERS, AIR)
ALGEBRA (SEE ALSO 'ALGEBRA, C*' OR ALGEBRA,
VON NEUMANN' OR 'ALGEBRA, CLIFFORD' OR 'ALGEBRA,
WEYL' OR 'ALGEBRA, LIE' OR 'ALGEBRA, GRASSMANN')
ALIGNMENT (SEE ALSO 'POLARIZATION')
ALLOY
-ALPHA MODEL (NUCLEAR MODEL)
-ALPHA PARTICLE (HELlUM)
ALUMINUM
*AMATI-FURINT-STANGHELLINI ('MODEL,
AMATI-FUBINI-STANGHELLINI' AND 'MODEL,
MULTIPERIPHERAL')
AMERICIUM
*AMPLIFIED (SEE ALSO 'ANALOG CIRCUIT'. USED
ONLY IN CONNECTION WITH CHAMBERS)
AMPLITUDE ANALYSIS ('INTERPRETATION OF
EXPERIMENTS', AMPLITUDE ANALYSIS', 'SPIN-
AMPLITUDE ANALYSIS')
ANALOG CIRCUIT (SEE ALSO 'ANALOG LOGIC')
ANALOG LOGIC (SEE ALSO 'ANALOG CIRCUIT')
-ANALOG MODEL
ANALOG-TO-DIGITAL CONVERTER
*ANALYTIC PROPERTIES (RESTRICTED USE; NOT FOR
REGGE POLES, STRUCTURE FUNCTIONS; WILL GENERALLY
BE COMBINED WITH KEYWORDS THE ANALYTIC PROPERTIES
OF WHICH ARE INVESTIGATED)
-ANALYTICITY (ANALYTIC PROPERTIES)
ANGULAR CORRELATION
*ANGULAR DEPENDENCE
ANGULAR DISTRIBUTION
ANGULAR MOMENTUM
*ANGULAR RESOLUTION (COUNTERS AND DETECTORS,
ANGULAR RESOLUTION)
-ANHARMONIC OSCILLATOR (MODEL, OSCILLATOR)
*ANISOTROPY (SEE 'COSMIC RADIATION, ANISOTROPY')
*ANNIHILATION
*ANOMALY
ANTI-D
ANTI-DO
ANTI-F
ANTI-K
ANTI-K BARYON
ANTI-K DEUTERON
ANTI-K LIGHT NUCLEUS
ANTI-K N
ANTI-K NUCLEON
ANTI-K NUCLEUS
ANTI-K P
ANTI-KO
ANTI-KO BARYON
ANTI-KO BARYON RESONANCE
ANTI-KO DEUTERON
ANTI-KO INTERMEDIATE BOSON
ANTI-KO K+
ANTI-KO K-
ANTI-KO LAMBDA
ANTI-KO LIGHT NUCLEUS
ANTI-KO MESON RESONANCE
ANTI-KO N
ANTI-KO NUCLEON
ANTI-KO NUCLEUS
ANTI-KO P
ANTI-KO QUARK
ANTI-KO VECTOR MESON
ANTI-N
ANTI-N BARYON RESONANCE
ANTI-N DEUTERON
ANTI-N HYPERON
ANTI-N INTERMEDIATE BOSON
ANTI-N LAMBDA
ANTI-N LIGHT NUCLEUS
ANTI-N NUCLEUS
ANTI-N OMEGA-
ANTI-N QUARK
ANTI-N SIGMA
ANTI-N SIGMA+
ANTI-N SIGMA-
ANTI-N SIGMAo
ANTI-N VECTOR MESON
ANTI-N XI
ANTI-N XI-
ANTI-N XIO
ANTI-P
*ANTI-P ATOM
ANTI-P BARYON RESONANCE
ANTI-P DEUTERON
ANTI-P HYPERON
ANTI-P INTERMEDIATE BOSON
ANTI-P LAMBDA
ANTI-P LIGHT NUCLEUS
ANTI-P N
ANTI-P NUCLEON
ANTI-P NUCLEUS
ANTI-P OMEGA-
ANTI-P P
ANTI-P QUARK
ANTI-P SIGMA
ANTI-P SIGMA+
ANTI-P SIGMA-
ANTI-P SIGMAo
ANTI-P VECTOR MESON
ANTI-P XI
ANTI-P XI-
ANTI-P XIO
ANTIBARYON
ANTIBARYON BARYON RESONANCE
ANTIBARYON DEUTERON
ANTIBARYON HYPERON
ANTIBARYON INTERMEDIATE BOSON
ANTIBARYON LAMBDA
ANTIBARYON LIGHT NUCLEUS
ANTIBARYON N
ANTIBARYON NUCLEON
ANTIBARYON NUCLEUS
ANTIBARYON OMEGA-
ANTIBARYON P
ANTIBARYON QUARK
ANTIBARYON SIGMA
ANTIBARYON SIGMA+
ANTIBARYON SIGMA-
ANTIBARYON SIGMAo
ANTIBARYON VECTOR MESON
ANTIBARYON XI
ANTIBARYON XI-
ANTIBARYON XIO
-ANTIDEUTERON (DEUTERON, ANTIPIRICLE)
-ANTIFERMION
-ANTIHADRON (HADRON, ANTIPIRICLE)
ANTIHYPERON
ANTIHYPERON BARYON RESONANCE
ANTIHYPERON DEUTERON
ANTIHYPERON INTERMEDIATE BOSON
ANTIHYPERON LIGHT NUCLEUS
ANTIHYPERON NUCLEUS
ANTIHYPERON QUARK
ANTILAMBDA
ANTILAMBDA BARYON RESONANCE
ANTILAMBDA DEUTERON
ANTILAMBDA INTERMEDIATE BOSON
ANTILAMBDA LIGHT NUCLEUS
ANTILAMBDA NUCLEUS
ANTILAMBDA QUARK
ANTILAMBDA VECTOR MESON
ANTILEPTON
ANTIMATTER
ANTIMONY
ANTINEUTRINO
ANTINEUTRINO ANTI-KO
ANTINEUTRINO ANTI-N
ANTINEUTRINO ANTI-P
ANTINEUTRINO ANTIBARYON

A
ANTINEUTRINO ANTINEUTRINO
ANTINEUTRINO ANTINUCLEON
ANTINEUTRINO BARYON
ANTINEUTRINO BARYON RESONANCE
ANTINEUTRINO BOSON
ANTINEUTRINO DEUTERON
ANTINEUTRINO ELECTRON
ANTINEUTRINO HADRON
ANTINEUTRINO HYPERON
ANTINEUTRINO INTERMEDIATE BOSON
ANTINEUTRINO K
ANTINEUTRINO K+
ANTINEUTRINO K-
ANTINEUTRINO K0
ANTINEUTRINO LAMBDA
ANTINEUTRINO LIGHT NUCLEUS
ANTINEUTRINO MESON
ANTINEUTRINO MESON RESONANCE
ANTINEUTRINO MUON
ANTINEUTRINO MUON+
ANTINEUTRINO MUON-
ANTINEUTRINO N
ANTINEUTRINO NUCLEON
ANTINEUTRINO NUCLEUS
ANTINEUTRINO OMEGA-
ANTINEUTRINO P
ANTINEUTRINO PI
ANTINEUTRINO PI+
ANTINEUTRINO PI-
ANTINEUTRINO PI0
ANTINEUTRINO POSITRON
ANTINEUTRINO QUARK
ANTINEUTRINO SIGMA
ANTINEUTRINO SIGMA+
ANTINEUTRINO SIGMA-
ANTINEUTRINO SIGMA0
ANTINEUTRINO VECTOR MESON
ANTINEUTRINO XI
ANTINEUTRINO XI-
ANTINEUTRINO XI0
ANTINEUTRINO/E/
ANTINEUTRINO/L/ (HEAVY-LEPTON ANTINEUTRINO)
ANTINEUTRINO/MU/
ANTINEUTRINO/TAU/
-ANTINEUTRINOPRODUCTION (INELTRINCPRODUCTION)
-ANTINEUTRON (ANTI-N)
ANTINUCLEON
ANTINUCLEON BARYON RESONANCE
ANTINUCLEON DEUTERON
ANTINUCLEON HYPERON
ANTINUCLEON INTERMEDIATE BOSON
ANTINUCLEON LAMBDA
ANTINUCLEON LIGHT NUCLEUS
ANTINUCLEON N
ANTINUCLEON NUCLEUS
ANTINUCLEON OMEGA-
ANTINUCLEON QUARK
ANTINUCLEON SIGMA
ANTINUCLEON SIGMA+
ANTINUCLEON SIGMA-
ANTINUCLEON SIGMA0
ANTINUCLEON VECTOR MESON
ANTINUCLEON XI
ANTINUCLEON XI-
ANTINUCLEON XI0
*ANTINUCLEUS
ANTIDOMEGA-
ANTIPARTICLE
ANTIQUARK
ANTISIGMA
ANTISIGMA BARYON RESONANCE
ANTISIGMA DEUTERON
ANTISIGMA INTERMEDIATE BOSON
ANTISIGMA LIGHT NUCLEUS
ANTISIGMA NUCLEUS
ANTISIGMA QUARK
ANTISIGMA+
ANTISIGMA-
ANTISIGMA0
ANTIXI
ANTIXI BARYON RESONANCE
ANTIXI DEUTERON
ANTIXI INTERMEDIATE BOSON
ANTIXI LIGHT NUCLEUS
ANTIXI NUCLEUS
ANTIXI QUARK
ANTIXI VECTOR MESON
ANTIXI-
ANTIXIO
*ANYTHING (ONLY IN REACTIONS)
*ANYTHING+ (ONLY IN REACTIONS)
*ANYTHING- (ONLY IN REACTIONS)
*ANYTHING0 (ONLY IN REACTIONS)
APPROXIMATION
-ARGAND PLOT (USE 'PARTIAL WAVE ANALYSIS')
ARGON
*ARGONNE PS
-ARRAY (SEE 'HODOSCOPE' OR 'PROGRAMMING')
ARSENIC
*ASSOCIATED PRODUCTION
ASTATINE
ASTROPHYSICS
*ASYMMETRY
*ASYMPTOTIC BEHAVIOR (NOT TO BE USED IN CASE OF HIGH ENERGY BEHAVIOR. FOR ASYMPTOTIC BEHAVIOR AT LOW ENERGIES SEE 'INFRARED PROBLEM')
-ASYMPTOTIC EXPANSION (SEE 'EXPANSION 1/N')
*ASYMPTOTIC FREEDOM ('FIELD THEORY, ASYMPTOTIC FREEDOM'; FOR LOW ENERGIES USE 'FIELD THEORY, INFRARED PROBLEM')
*AT REST (IN ENERGY CATEGORY, '0 GEV' IS ADDED)
ATOM
-ATOMIC BEAM (USE 'BEAM, ATOM')
-ATOMIC NUMBER (USE 'MASS NUMBER')
ATOMIC PHYSICS
-AUTOMODELITY (SCALING)
-AUXILIARY CIRCUITS (FOR ELECTRONIC CIRCUITS 'DIGITAL LOGIC' IS USED, FOR OTHER CIRCUITS 'ELECTRICAL ENGINEERING')
*AXIAL
*AXIAL GAUGE (GAUGE FIELD THEORY, AXIAL GAUGE)
*AXIAL-VECTOR (CURRENT, AXIAL-VECTOR)
AXIAL-VECTOR MESON
*AXIAL-VECTOR MESON DOMINANCE (MODEL, AXIAL-VECTOR MESON DOMINANCE)
AXIOMATIC FIELD THEORY
*AXION (POSTULATED PARTICLE, AXION)
A1(1070)
-A2 EXCHANGE (EXCHANGE, A2(1310))
-A2 SPLITTING (A2(1310), MASS DIFFERENCE)
A2(1310)
A3(1640)

B(1235)
BACKGROUND
-BACKGROUND RADIATION (RADIATION, BACKGROUND)
BACKSCATTER
-BACKWARD SCATTERING (BACKSCATTER)
*BAECKLUND (TRANSFORMATION, BAECKLUND)
*BAG (MODEL, BAG)
*BALI-CHEW-PIGNOTTI (MODEL, BALI-CHEW-PIGNOTTI)
-BANACH SPACE (USE 'LINEAR SPACES')
*BARDAKCI-RUEGG (MODEL, BARDAKCI-RUEGG)
*BARDAKCI-RUEGG-VIRASORO (MODEL,
 BARDAKCI-RUEGG-VIRASORO)
BARIUM
BARYON
BARYON ANTI-N
BARYON ANTI-P
BARYON ANTIBARYON
BARYON ANTIHYPERON
BARYON ANTILAMBDA
BARYON ANTINUCLEON
BARYON ANTISIGMA
BARYON ANTIXI
BARYON BARYON
BARYON BARYON RESONANCE
BARYON DEUTERON
- ϵ BARYON EXCHANGE (EXCHANGE, BARYON)
BARYON HYPERON
BARYON INTERMEDIATE BOSON
BARYON LAMBDA
BARYON LIGHT NUCLEUS
BARYON N
BARYON NUCLEON
BARYON NUCLEUS
-BARYON NUMBER (USUALLY 'CONSERVATION LAW,
 BARYON'; SEE ALSO 'QUANTUM NUMBER, BARYON')
BARYON OMEGA-
BARYON P
-BARYON POLE MODEL (EXCHANGE, BARYON)
BARYON QUARK
BARYON RESONANCE
BARYON RESONANCE BARYON RESONANCE
BARYON RESONANCE DEUTERON
-BARYON RESONANCE FORMATION (USE 'BARYON
 RESONANCE, SCATTERING')
BARYON RESONANCE LIGHT NUCLEUS
BARYON RESONANCE NUCLEUS
BARYON RESONANCE QUARK
BARYON SIGMA
BARYON SIGMA+
BARYON SIGMA-
BARYON SIGMAO
BARYON VECTOR MESON
BARYON XI
BARYON XI-
BARYON XIO
BARYONIUM
*BATAVIA PS
BEAM
-BEAM BLOWUP (BEAM INSTABILITY)
-BEAM CALIBRATION (BEAM MONITORING)
-BEAM CHOPPER (SEE 'BUNCHING')
-BEAM COOLING (USE 'BEAM DAMPING')
BEAM DAMPING
*BEAM DUMP (EXPERIMENTAL METHODS, BEAM DUMP)
*BEAM DUMPING (STORAGE RING, BEAM CUMPING)
BEAM DYNAMICS
BEAM EMMITTANCE
BEAM FOCUSING
BEAM INSTABILITY
-BEAM LINES (SEE 'BEAM TRANSPORT')
BEAM LOADING
BEAM LOSS
BEAM MONITORING
BEAM OPTICS
BEAM OSCILLATION
-BEAM POLARIZATION (USE 'BEAM, POLARIZATION'
 FOR MEASUREMENT OF POLARIZATION DEGREE. SEE ALSO
 'POLARIZED BEAM')
-BEAM SEPARATOR (SEE 'PARTICLE SEPARATOR')
-BEAM STOP (SEE 'BEAM DUMPING')
BEAM TRANSPORT
*BEAM-BEAM (SCATTERING, BEAM-BEAM)
*BEAUTY (QUARK, BEAUTY)
*BELL-STEINBERGER (MODEL, BELL-STEINBERGER)
BENDING MAGNET
*BERKELEY CYCL
*BERKELEY PS
BERKELIUM
-BERMAN-BJORKEN-KEGUT MODEL (TRANSVERSE
 MOMENTUM, HIGH)
BERYLLOIUM
-BETA DECAY (SEMILEPTONIC DECAY)
-BETA FUNCTION (SEE 'BEAM OPTICS' OR
 'RENORMALIZATION GROUP, CALLAN-SYMANZIK EQUATION')
BETATRON
BETATRON OSCILLATION
-BETHE-GOLDSTONE (NOT USED)
*BETHE-HEITLER (APPROXIMATION, BETHE-HEITLER)
BETHE-SALPETER EQUATION
-RHABHA SCATTERING (ELECTRON POSITRON, ELASTIC
 SCATTERING)
*BIALAS-ZALEWSKI (MODEL, BIALAS-ZALEWSKI)
*BIANCHI IDENTITY (FIELD THEORY, BIANCHI IDENTITY)
BIBLIOGRAPHY
-BILOCAL CURRENT ALGEBRA (FIELD THEORY,
 OPERATOR ALGEBRA)
-BILOCAL OPERATOR ALGEBRA (FIELD THEORY,
 OPERATOR ALGEBRA)
BINDING ENERGY
BISMUTH
*BJORKEN (SCALING, BJORKEN)
*BJORKEN LIMIT (HIGH ENERGY BEHAVIOR, BJORKEN
 LIMIT)
-BJORKEN MODEL (HIGH ENERGY BEHAVIOR, BJORKEN
 LIMIT)
-BJORKEN-JOHNSON-LOW (HIGH ENERGY BEHAVIOR,
 BJORKEN LIMIT)
-BJORKEN-KOGUT MODEL (USE 'INCLUSIVE REACTION,
 EXCLUSIVE REACTION')
-BJORKEN-PASCOS (MODEL, PARTON)
-BLACK HOLE (GRAVITATION)
-BLANKENBECLER-BRODSKY-GUNION (MODEL,
 CONSTITUENT INTERCHANGE)
-BLOCK TRANSFER (DIGITAL LOGIC, READOUT)
*BLOOM-GILMAN ('SUM RULE, BLOOM-GILMAN' OR
 'DUALITY, BLOOM-GILMAN')
-BLUMLEIN LINE (SEE 'POWER SUPPLY' AND
 'SREAMER CHAMBER')
*BONN ES
BOOK
*BOOSTER
BOOTSTRAP
*BORN (APPROXIMATION, BORN)
BORDON
-BOSE STATISTICS (BOSON, STATISTICS)
BOSON
 BOSON ANTI-KO
 BOSON ANTI-N
 BOSON ANTI-P
 BOSON ANTIBARYON
 BOSON ANTIHYPERON
 BOSON ANTILAMBDA
 BOSON ANTINUCLEON
 BOSON ANTISIGMA
 BOSON ANTIXI
 BOSON BARYON
 BOSON BARYON RESONANCE
 BOSON BOSON
 BOSON DEUTERON
 BOSON HYPERON
 BOSON INTERMEDIATE BOSON
 BOSON K
 BOSON K+
 BOSON K-
 BOSON KO
 BOSON LAMBDA
 BOSON LIGHT NUCLEUS
 BOSON MESON RESONANCE
 BOSON N
 BOSON NUCLEON
 BOSON NUCLEUS
 BOSON OMEGA-
 BOSON P
 BOSON PI
 BOSON PI+
 BOSON PI-
 BOSON PIO
 BOSON QUARK
 BOSON SIGMA
 BOSON SIGMA+
 BOSON SIGMA-
 BOSON SIGMAO
 BOSON VECTOR MESON
 BOSON XI
 BOSON XI-
 BOSON XIO
-BOTTOM (QUARK, BEAUTY)
-BOUND ELECTRONS (ATOMIC PHYSICS)
BOUNDED STATE
*BOUNDARY CONDITION (MODEL, BOUNDARY CONDITION)
-BOX DIAGRAM (SEE 'FEYNMAN GRAPH' (RESTRICTED USE))
-BPHZ (RENORMALIZATION, REGULARIZATION)
*BRANCH HIGHWAY (CAMAC SYSTEM, BRANCH HIGHWAY)
*BRANCHING RATIO (VERY RESTRICTED USE: ONLY IN
 CASE OF MEASURED OR CALCULATED NUMERICAL VALUE)
-BRANS-DICKE (GRAVITATION)

B

B
*BREAKUP ("FISSICK, BREAKUP" OR, E.G., "P.
BREAKUP")
*BREIT-WIGNER (MODEL, BREIT-WIGNER)
BREMSTRÄHLUNG
-BROKEN SYMMETRY (SYMMETRY BREAKING)
BROMINE
*BROOKHAVEN LINAC
*BROOKHAVEN PS
BUBBLE CHAMBER
BUBBLE CHAMBER (DEUTERIUM)

BUBBLE CHAMBER(HEAVY LIQUID)
-BUBBLE CHAMBER(HELIUM) (USE "BUBBLE CHAMBER"
AND "HELIUM")
BUBBLE CHAMBER(HYDROGEN)
BUILDINGS
BUNCHING
*BYPASS (STORAGE RING, BYPASS)
-BS MODEL ("MODEL, VENEZIANO" AND "N-POINT
FUNCTION")

-C INVARIANCE (INVARIANCE, CHARGE CONJUGATION)
-C MESON RESONANCE (Q REGION)
C (ALGEBRA, C*)
-C-PARITY (QUANTUM NUMBER, CHARGE CONJUGATION)
*CABIBBO (MODEL, CABIBBO)
*CABIBBO ANGLE (WEAK INTERACTION, CABIBBO ANGLE)
*CABIBBO-HORWITZ-NE*EMAN (MODEL,
 CABIBBO-HORWITZ-NE*EMAN)
*CABIBBO-MAIANI-PREPARATA (MODEL,
 CABIBBO-MAIANI-PREPARATA)
*CABIBBO-RADICATI (*SUM RULE, CABIBBO-RADICATI
 AND 'CURRENT ALGEBRA')
CADMIUM
CALCIUM
-CALCULATIONS (SEE 'NUMERICAL CALCULATIONS')
CALIBRATION
CALIFORNIA
*CALLAN-GROSS (SUM RULE, CALLAN-GROSS)
*CALLAN-SYMANZIK EQUATION (FENORMALIZATION
 GROUP, CALLAN-SYMANZIK EQUATION)
*CALLAN-TREIMAN RELATION (CURRENT ALGEBRA,
 CALLAN-TREIMAN RELATION)
-CALORIMETER (SEE 'TOTAL-ABSORPTION COUNTER'
 OR, IN SPECIAL CASES, 'IONIZATION CHAMBER'; FOR
 QUANTAMETERS SEE 'IONIZATION CHAMBER' AND 'BEAM
 MONITORING'; SEE ALSO 'LIQUID ARGON DETECTOR')
*CALTECH ES
 CANAC SYSTEM
*CAMBRIDGE ES
*CANESCHI-PIGNOTTI (MODEL, CANESCHI-PIGNOTTI)
-CANONICAL ANTICOMMUTATION RELATIONS (USE
 'ALGEBRA, COMMUTATION RELATIONS', RESTRICTED USE)
-CANONICAL COMMUTATION RELATIONS (USE 'ALGEBRA,
 COMMUTATION RELATIONS' (RESTRICTED USE))
CAPTURE
-CAR (USE 'ALGEBRA, COMMUTATION RELATIONS'
 (RESTRICTED USE))
CARBON
*CARLITZ-KISLINGER (MODEL, CARLITZ-KISLINGER)
*CASCADE ('MODEL, CASCADE' OR 'NUCLEUS,
 CASCADE'; SEE ALSO 'SHOWERS' AND 'CASCADE DECAY')
*CASCADE DECAY
-CASCADE EVAPORATION MODEL (MODEL, CASCADE)
-CASIMIR OPERATOR (USE 'GROUP THEORY')
-CASTILLEJO-DALITZ-CYSON POLES (PARTIAL WAVE,
 DISPERSION RELATIONS)
*CAUSALITY (SEE 'FIELD THEORY, CAUSALITY',
 'QUANTUM MECHANICS, CAUSALITY' OR 'DISPERSION
 RELATIONS, CAUSALITY')
-CAVITY (SEE 'RF SYSTEM')
-CC (SEE 'CANAC SYSTEM, CONTROLLER')
-CCR (USE 'ALGEBRA, COMMUTATION RELATIONS'
 (RESTRICTED USE))
-CDD POLES (PARTIAL WAVE, DISPERSION RELATIONS)
*CELLO (AT PETRA: 'MAGNETIC DETECTOR, CELLO')
*CENTRAL REGION (USE 'INCLUSIVE REACTION,
 CENTRAL REGION')
CERAMICS
CERIUM
*CERN CYCL
*CERN MUON STOR
*CERN SPS
*CERN STOR
*CERNL PS
-CERULUS-MARTIN (USE 'HIGH ENERGY BEHAVIOR' AND
 'SCATTERING, WIDE-ANGLE')
CESIUM
-CGL (DISPERSION RELATIONS, CHEW-GOLDBERGER-LOW)
-CGLN (DISPERSION RELATIONS,
 CHEW-GOLDBERGER-LOW-NAMBU)
*CHAN-LOSKIEWICZ-ALLISON (MODEL, CHAN-
 LOSKIEWICZ-ALLISON)
-CHANNEL (NOT APPLIED)
CHANNEL CROSS SECTION (USED FOR THE INTEGRATED
 DIFFERENTIAL CROSS SECTION OF A CHANNEL)
CHARGE
*CHARGE CONJUGATION ('INVARIANCE, CHARGE
 CONJUGATION' OR 'VIOLATION, CHARGE CONJUGATION'
 OR 'QUANTUM NUMBER, CHARGE CONJUGATION')
CHARGE DISTRIBUTION (SEE ALSO 'FORM FACTOR')
CHARGE EXCHANGE
-CHARGE INDEPENDENCE (USE 'NUCLEAR FORCES' OR
 'MESON NUCLEON, INTERACTION')
-CHARGE STATISTICS (CHARGE, STATISTICS)
CHARGED CURRENT
CHARGED PARTICLE
*CHARGED SCALAR (EXCHANGE, CHARGED SCALAR)
-CHARGED SCALAR STATIC MODEL (*MODEL, STATIC
 AND 'EXCHANGE, CHARGED SCALAR')
*CHARM (QUARK, CHARM)
*CHARM CHANGING (SEE 'CURRENT, CHARM CHANGING')
CHARMED BARYON
-CHARMED HADRON (*CHARMED MESON* OR 'CHARMED
 BARYON')

CHARMED MESON
CHARMED PARTICLE
*CHARMONIUM (QUARK, CHARMONIUM)
-CHARPAK CHAMBER (PROPORTIONAL CHAMBER)
CHEMICALS
CHEMISTRY
-CHENG-DASHEN (SYMMETRY, CHIRAL)
*CHENG-WU (MODEL, CHENG-WU)
*CHERENKOV (RADIATION, CHERENKOV)
 CHERENKOV COUNTER
-CHERENKOV RADIATION (RADIATION, CHERENKOV)
-CHERENKOV SPECTROMETER ('CHERENKOV COUNTER'
 AND 'COUNTERS AND DETECTORS')
-CHEW-FRAUTSCHI PLOT (REGGE POLES)
*CHEW-GOLDBERGER-LOW (DISPERSION RELATIONS,
 CHEW-GOLDBERGER-LOW)
*CHEW-GOLDBERGER-LOW-NAMBU (DISPERSION
 RELATIONS, CHEW-GOLDBERGER-LOW-NAMBU)
*CHEW-LOW (MODEL, CHEW-LOW)
*CHEW-MANDELSTAM (MODEL, CHEW-MANDELSTAM)
-CHEW-PIGNOTTI (MODEL, MULTIPERIPHERAL)
*CHICAGO CYCL (ONLY FOR EXPERIMENTAL RESULTS
 GAINED THERE)
 CHI(3410)
*CHI(3450) (NEW PARTICLE, CHI(3450))
-CHI(3510) (USE 'CHI/PC(3510)')
 CHI(3550)
 CHI/PC(3510)
*CHIRAL (GENERALLY 'SYMMETRY, CHIRAL')
CHLORINE
*CHOU-YANG (MODEL, CHOU-YANG)
CHROMIUM
-CIM (USE 'MODEL, CONSTITUENT INTERCHANGE')
-CIRCUIT ANALYSIS (SEE 'ELECTRONICS')
-CLA (MODEL, CHAN-LOSKIEWICZ-ALLISON)
*CLASSICAL (FIELD THEORY, CLASSICAL)
*CLERSCH-GORDAN COEFFICIENTS (GROUP THEORY,
 CLEBSCH-GORDAN COEFFICIENTS)
*CLIFFORD (ALGEBRA, CLIFFORD)
-CLOSED-LOOP DIAGRAM ('FIELD THEORY,
 HIGHER-ORDER' OR 'DUALITY, HIGHER-ORDER')
-CLOSED-ORBIT CORRECTION (CORRECTION, ORBIT)
*CLOSURE (APPROXIMATION, CLOSURE)
CLOUD CHAMBER
*CLUSTER (MODEL, CLUSTER)
*CLUSTER ANALYSIS (MULTIDIMENSIONAL ANALYSIS,
 CLUSTER ANALYSIS)
-CLUSTER EXPANSION ('FIELD THEORY' OR 'NUCLEAR
 PHYSICS')
COBALT
-COHEN-TANNOURI-HENNEY-KANE (SEE 'MODEL,
 ABSORPTION')
*COHERENT INTERACTION (ALSO 'MODEL, COHERENT
 INTERACTION')
*COHERENT PRODUCTION
*COHERENT STATE (SEE 'QUANTUM MECHANICS,
 COHERENT STATE' OR 'QUANTUM ELECTRODYNAMICS,
 COHERENT STATE')
COIL
*COINCIDENCE (FAST LOGIC, COINCIDENCE)
-COLEMAN-GLASHOW FORMULA (BARYON, MASS DIFFERENCE)
-COLEMAN-WEINBERG INSTABILITY (SYMMETRY BREAKING)
*COLLECTIVE (USED ONLY IN 'ACCELERATOR,
 COLLECTIVE' SEE ALSO 'COLLECTIVE PHENOMENA')
*COLLECTIVE PHENOMENA ('FIELD THEORY,
 COLLECTIVE PHENOMENA' OR 'NUCLEAR PHYSICS,
 COLLECTIVE PHENOMENA')
*COLLIDING BEAMS (FOR EXPERIMENTS ONLY, FOR
 ACCELERATOR ASPECTS SEE 'STORAGE RING')
-COLLIDING-BEAM DETECTORS (USE APPROPRIATE
 KEYWORDS FOR CHAMBERS OR DETECTORS; SEE ALSO
 'MAGNETIC DETECTOR' OR 'HYBRID SYSTEM' OR
 'FOUR-PT-DETECTOR'; ADD 'MAGNETIC FIELD' WHERE
 APPROPRIATE)
*COLOR (QUARK, COLOR)
COLORED PARTICLE
COMMUNICATIONS
*COMMUTATION RELATIONS ('FIELD THEORY,
 COMMUTATION RELATIONS' OR 'CURRENT ALGEBRA,
 COMMUTATION RELATIONS' OR 'QUANTUM MECHANICS,
 COMMUTATION RELATIONS' OR 'ALGEBRA, COMMUTATION
 RELATIONS' (VERY RESTRICTED USE))
-COMMUTATOR (SEE 'COMMUTATION RELATIONS')
-COMPARISON OF EXPERIMENTAL RESULTS
 (INTERPRETATION OF EXPERIMENTS)
-COMPILER (USE 'COMPUTER' AND 'PROGRAMMING')
-COMPLEX REGGE POLES (REGGE POLES)
*COMPOSITE (MODEL, COMPOSITE)
-COMPOSITE BOSON (*MODEL, BOSON* AND 'MODEL,
 COMPOSITE')
-COMPOSITE PARTICLE MODEL (MODEL, COMPOSITE)
-COMPOUND NUCLEUS (NUCLEAR REACTION)

C
COMPOUNDS
COMPTON SCATTERING
COMPUTER
CONCRETE
*CONDENSATION (SEE 'PI, CONDENSATION' OR 'N, CONDENSATION')
CONFERENCE
*CONFIGURATION (INTERFERENCE, CONFIGURATION)
-CONFIGURATION MIXING (INTERFERENCE, CONFIGURATION)
*CONFINEMENT (QUARK, CONFINEMENT)
*CONFORMAL (INVARIANCE, CONFORMAL)
-CONFORMAL MAPPING (SEE 'NUMERICAL MATHEMATICS' OR 'ANALYTIC PROPERTIES' OR 'DATA ANALYSIS METHOD')
CONSERVATION LAW
*CONSERVED A-V CURRENT (MODEL, CONSERVED A-V CURRENT)
*CONSERVED VECTOR CURRENT (MODEL, CONSERVED VECTOR CURRENT)
-CONSPIRACY (USE 'REGGE POLES, FORWARD SCATTERING')
*CONSTITUENT INTERCHANGE (MODEL, CONSTITUENT INTERCHANGE)
-CONSTITUENT QUARK (SEE 'QUARK' OR 'MODEL, QUARK PARTON')
*CONSTRUCTIVE (FIELD THEORY, CONSTRUCTIVE)
*CONTACT COUPLING (MODEL, CONTACT COUPLING)
-CONTACT INTERACTION (MODEL, CONTACT COUPLING)
-CONTAMINATION (SEE 'DOSIMETRY' OR 'BACKGROUND' OR 'ADMIXTURE')
*CONTINUOUS MASS (SUM RULE, CONTINUOUS MASS)
*CONTINUOUS MOMENT (SUM RULE, CONTINUOUS MOMENT)
CONTROL SYSTEM
*CONTROLLER (CAMAC SYSTEM, CONTROLLER)
*COPLANAR (ANGULAR DISTRIBUTION, COPLANAR)
COPPER
*CORNELL ES
*CORNELL CESR STOP
CORRECTION
CORRELATION
CORRELATION FUNCTION
COSMIC RADIATION
-COSMOLOGY (SEE 'ASTROPHYSICS')
*COSTS
-COTTINGHAM FORMULA (MASS DIFFERENCE)
*COULOMB
-COULOMB DISSOCIATION (NUCLEAR REACTION, COULOMB SCATTERING)
*COULOMB GAUGE (GAUGE FIELD THEORY, COULOMB GAUGE)
*COULOMB SCATTERING

COUNTERS AND DETECTORS
*COUPLED CHANNEL (PARTIAL WAVE ANALYSIS, COUPLED CHANNEL)
COUPLING (RESTRICTED USE)
COUPLING CONSTANT (RESTRICTED USE, ONLY IN COMBINATIONS WITH PARTICLES)
-COVARIANCE (USE 'INVARIANCE, LORENTZ' (RESTRICTED USE))
*CP ('INVARIANCE, CP' OR 'VIOLATION, CP')
*CPT ('INVARIANCE, CPT' OR 'VIOLATION, CPT')
-CRATE CONTROLLER (CAMAC SYSTEM, CONTROLLER)
-CRITICAL EXPONENT (SEE 'CRITICAL PHENOMENA')
*CRITICAL PHENOMENA ('FIELD THEORY, CRITICAL PHENOMENA' OR 'THERMODYNAMICS, CRITICAL PHENOMENA') OR 'STATISTICAL MECHANICS, CRITICAL PHENOMENA')
-CRITICAL POINT (SEE 'CRITICAL PHENOMENA')
CROSS SECTION (RESTRICTED USE, SEE ALSO 'TOTAL CROSS SECTION' OR 'DIFFERENTIAL CROSS SECTION' OR 'CHANNEL CROSS SECTION')
*CROSSING (SYMMETRY, CROSSING)
-CRYOGENICS (SEE 'LOW TEMPERATURE' OR 'SUPERCONDUCTING')
CRYSTAL
*CRYSTAL BALL (AT SPEAR: 'MAGNETIC DETECTOR, CRYSTAL BALL')
-CRYSTAL SCINTILLATOR (USE 'SCINTILLATION COUNTER, CRYSTAL')
*CUMULATIVE PRODUCTION (SEE 'HADRON NUCLEUS, CUMULATIVE PRODUCTION')
CURIUM
CURRENT (RESTRICTED USE, SEE ALSO 'NEUTRAL CURRENT', 'CHARGED CURRENT' OR 'WEAK CURRENT')
CURRENT ALGEBRA
-CURRENT COMMUTATION RELATIONS (CURRENT ALGEBRA, COMMUTATION RELATIONS)
-CURRENT COMMUTATORS (CURRENT ALGEBRA, COMMUTATION RELATIONS)
-CURRENT CONSERVATION LAW (CURRENT CONSERVATION LAW)
-CURRENT QUARK MODEL (QUARK, CURRENT)
*CURRENT-CURRENT (EITHER 'MODEL, CURRENT-CURRENT' OR 'INTERFERENCE, CURRENT-CURRENT')
-CURRENT-CURRENT MIXING (INTERFERENCE, CURRENT-CURRENT)
*CUTKOSKY-ZACHARTASEN (MODEL, CUTKOSKY-ZACHARTASEN)
-CVC (MODEL, CONSERVED VECTOR CURRENT)
CYCLOTRON

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D ANTI-0
D(1265)
D+
D-
D*(2010)
D**
*D/F RATIO (COUPLING CONSTANT, D/F RATIO)
-DAC (USE 'ANALOG CIRCUIT')
*DALITZ PLOT (MULTIDIMENSIONAL ANALYSIS, DALITZ PLOT)
-DAMA ("MODEL, DUAL RESONANCE" AND "ANALYTIC PROPERTIES")
*DAMAGE (RADIATION, DAMAGE)
-DAMPING (SEE 'ENERGY LOSS' OR 'BEAM DAMPING')
-DASHEN-FUBINI-HELL-MANN (SEE 'SUM RULE, ADLER-DASHEN-HELL-MANN-FUBINI')
*DASP (AT DORIS; "MAGNETIC DETECTOR, DASP")
-DATA ANALYSIS (SEE 'STATISTICAL ANALYSIS' OR 'MULTIDIMENSIONAL ANALYSIS' OR 'PARTIAL WAVE ANALYSIS' OR 'DATA COMPILEATION' OR 'DATA ANALYSIS METHOD' OR 'INTERPRETATION OF EXPERIMENTS')
DATA ANALYSIS METHOD (RESTRICTED USE)
-DATA COLLECTION (SEE 'DATA COMPILEATION')
DATA COMPILEATION
-DATA HANDLING (SEE 'PROGRAMMING')
-DATA PRESENTATION (SEE 'INTERPRETATION OF EXPERIMENTS' OR 'DATA ANALYSIS METHOD')
-DATA PROCESSING (SEE 'COMPUTER' OR 'PROGRAMMING')
*DE SITTER ("GROUP THEORY, DE SITTER" OR "ALGEBRA, DE SITTER")
DECAY (RESTRICTED USE, IF POSSIBLE USE MORE SPECIFIC TERM)
-DECAY FRACTION (SEE 'DECAY RATE')
*DECAY MODES
*DECAY RATE (PARTICLE, DECAY RATE)
*DECAY WIDTH (PARTICLE, DECAY WIDTH)
*DECISION (ONLY USED AS 'FAST LOGIC, DECISION')
*DECK ("EFFECT, DECK")
-DECK MODEL (SEE 'EFFECT, DECK')
*DEEP INELASTIC SCATTERING (ALSO 'MODEL, DEEP INELASTIC SCATTERING')
-DEFORMABLE SPHERE MODEL (MODEL, PARTICLE)
-DEFORMED NUCLEUS (NUCLEAR PROPERTIES)
*DELAY LINE (PROPORTIONAL CHAMBER, DELAY LINE)
*DELBRUECK (SCATTERING, DELBRUECK)
*DELTA ("NUCLEON RESONANCE, DELTA" (WITH J=3/2))
-DELTA(I)=... (SELECTION RULE, ISCPIN)
-DELTA(S)=... ("SELECTION RULE, STRANGENESS". SEE ALSO "CURRENT, STRANGENESS CHANGING")
DELTA(1236)
DELTA(1236)+
DELTA(1236)++
DELTA(1236)-
DELTA(1236)—
DELTA(1236)0
DELTA(1650)
DELTA(1670)
DELTA(1890)
DELTA(1910)
DELTA(1950)
DELTA(2420)
DELTA(2850)
DELTA(3230)
DELTA(4970)
DENSITY
*DENSITY MATRIX (GENERALLY 'SPIN, DENSITY MATRIX')
DEPENDENCE (RESTRICTED USE)
*DEPOLARIZATION (POLARIZATION, DEPOLARIZATION)
-DESER-GILBERT-SUDARSHAN (SEE 'SPECTRAL REPRESENTATION')
*DESY ES (AT HAMBURG)
*DESY DORIS STAR (AT HAMBURG)
*DESY PETRA STAR (AT HAMBURG)
-DETECTION ("COUNTERS AND DETECTORS" OR "MEASUREMENT" OR "PARTICLE IDENTIFICATION")
-DETECTOR (USE MORE SPECIFIC KEYWORDS)
DEUTERIUM (SEE ALSO 'DEUTERON')
DEUTERON (SEE ALSO 'DEUTERIUM')
DEUTERON DEUTERON
DEUTERON INTERMEDIATE BOSON
DEUTERON LIGHT NUCLEUS
DEUTERON NUCLEUS
*DIBARYON (BARYON RESONANCE, DIBARYON)
DIFFERENTIAL CROSS SECTION (FOR THE INTEGRATED DIFFERENTIAL CROSS SECTION OF A CHANNEL, USE "CHANNEL CROSS SECTION")
DIFFRACTION
-DIFFRACTION DISSOCIATION (DIFFRACTION, DISSOCIATION)
-DIFFRACTION MODEL ("MODEL, DIFFRACTION" OR, EXPERIMENTAL, "INTERPRETATION OF EXPERIMENTS, DIFFRACTION")
-DIFFRACTION SCATTERING (DIFFRACTION)
-DIFFRACTIVE EXCITATION (MODEL, DIFFRACTION)
-DIFFRACTIVE PRODUCTION (DIFFRACTION, PRODUCTION)
DIFFUSION
-DIFFUSION CHAMBER (CLOUD CHAMBER)
DIGITAL LOGIC ("DIGITAL LOGIC, READOUT" OR "DIGITAL LOGIC, INTERFACE")
-DIGITAL-ANALOG CONVERTER (SEE "ANALOG CIRCUIT")
-DIGITAL-DIGITAL CIRCUIT (DIGITAL LOGIC)
-DIKAON (SEE, E.G., "FINAL STATE, (2K)")
-DILATATION (USE "SYMMETRY, DILATION")
*DILATION (SYMMETRY, DILATION)
-DILATION (USE "SYMMETRY, DILATION")
*DILEPTON (FINAL STATE, DILEPTON)
*DILUTE GAS (APPROXIMATION, DILUTE GAS)
*DIMUON (FINAL STATE, DIMUON)
*DIP (DIFFERENTIAL CROSS SECTION, DIP)
-DIP MECHANISM (NOT USED)
*DIPOLE
-DIPOLE (SEE "FORM FACTOR")
-DIPOLE MAGNET (SEE "BENDING MAGNET")
*DIQUARK (QUARK, DIQUARK)
*DIRAC (FIELD EQUATIONS, DIRAC)
-DIRAC PARTICLE ("FERMION", SEE ALSO "FIELD EQUATIONS" OR "MAGNETIC MONOPOLE")
*DIRECT PRODUCTION
-DIRECT REACTION (SEE "NUCLEAR REACTION")
-DISCHARGE CHAMBER (SPARK CHAMBER)
-DISCRIMINATOR (ANALOG-TO-DIGITAL CONVERTER)
*DISPERSION
DISPERSION RELATIONS
-DISPERSION THEORY (DISPERSION RELATIONS)
-DISPLAY (FREQUENTLY: PULSE-HEIGHT ANALYZER)
*DISSOCIATION (DIFFRACTION, DISSOCIATION)
*DISTORTED WAVE BORN (APPROXIMATION, DISTORTED WAVE BORN)
*DISTORTED WAVE IMPULSE (APPROXIMATION, DISTORTED WAVE IMPULSE)
-DISTRIBUTION (IN EXPERIMENTAL PAPERS: "SPECTRA" OR "ANGULAR DISTRIBUTION" OR "ENERGY SPECTRUM" OR "MASS SPECTRUM")
DOSIMETRY
-DOUBLE ABSORPTION (USE "ABSORPTION" AND "FINAL-STATE INTERACTION")
-DOUBLE CAPTURE (USE "CAPTURE, MULTIPLE")
-DOUBLE CHARGE EXCHANGE (USE "CHARGE EXCHANGE, MULTIPLE")
-DOUBLE EXCHANGE (SEE "REGGE POLES, MULTI-REGGE" OR "FINAL-STATE INTERACTION" OR "CHARGE EXCHANGE, MULTIPLE")
-DOUBLE EXCITATION (SEE "EXCITED STATE")
-DOUBLE PAIR PRODUCTION (PAIR PRODUCTION, MULTIPLE PRODUCTION)
-DOUBLE PERIPHERAL (MODEL, PERIPHERAL)
-DOUBLE REGGE EXCHANGE (REGGE POLES, MULTI-REGGE)
-DOUBLE REGGE POLE (REGGE POLES, MULTI-REGGE)
-DOUBLE SCATTERING (SEE "EXCHANGE" OR "MULTIPLE SCATTERING")
-DOUBLE SPECTRAL FUNCTION (MANDELSTAM REPRESENTATION)
-DOUBLE-ARM SPECTROMETER (SEE "MAGNETIC SPECTROMETER")
-DOUBLET (POSSIBLY "MASS DIFFERENCE")
*DOWN (QUARK, DOWN)
-DRELL EFFECT (USE "PI+ PI-, PHOTOPRODUCTION" AND "EXCHANGE, ONE-MESON")
-DRELL RATIO (USE "ELECTRON POSITRON, ANNIHILATION" AND "TOTAL CROSS SECTION, RATIO")
*DRELL-HEARN-GERASIMOV (SUM RULE, DRELL-HEARN-GERASIMOV)
-DRELL-HIIDA-DECK MODEL (USE "EFFECT, DECK")
-DRELL-LEVY-YAN (USE "MODEL, PARTON")
*DRELL-YAN ("MODEL, PARTON" AND "MODEL, DRELL-YAN")
*DRELL-YAN-WEST (MODEL, DRELL-YAN-WEST)
-DRESSED PARTICLE (PROPAGATOR, RENORMALIZATION)
DRIFT CHAMBER
*DROPLET (MODEL, DROPLET)
-DUAL ABSORPTIVE MODEL (MODEL, ABSORPTION)
-DUAL AMPLITUDE WITH MANDELSTAM ANALYTICITY ("MODEL, DUAL RESONANCE" AND "ANALYTIC PROPERTIES")
-DUAL DIFFRACTION ("DIFFRACTION" AND "DUALITY")
DUAL FIELD THEORY (SEE ALSO "FIELD THEORY, DUALITY")
-DUAL MODEL (SEE "MODEL, DUAL RESONANCE" OR "DUALITY")
*DUAL RESONANCE (MODEL, DUAL RESONANCE)
-DUAL-LOOP MODEL (DUAL FIELD THEORY, HIGHER-ORDER)
DUALITY (USUALLY WITHOUT "REGGE POLES")
*DUBNA CYCL
*DUBNA PS
*DUERR-PILKUHN (MODEL, DUERR-PILKUHN)

D

D
-DUFFIN-KEMMER (FIELD EQUATIONS)
-DUFFIN-KEMMER-PETIAU (FIELD EQUATIONS)
-DWBA (APPROXIMATION, DISTORTED WAVE BORN)
-DYNAMIC GROUP (GROUP THEORY)
-DYNAMICAL SYMMETRY BREAKING (SEE "SYMMETRY
BREAKING")

*DYON (FIELD EQUATIONS, DYON)
-DYSON REPRESENTATION (SPECTRAL REPRESENTATION)
DYSPROTIUM
DO
DO ANTI-DO

E

E(1422)
-ECONOMY (SEE 'COSTS')
-EDDY CURRENT (SEE 'MAGNETIC FIELD' AND
POSSIBLY 'CORRECTION')
EFFECT (RESTRICTED USE)
*EFFECTIVE LAGRANGIANS ('CURRENT ALGEBRA,
EFFECTIVE LAGRANGIANS', OR 'FIELD THEORY,
EFFECTIVE LAGRANGIANS')
-EFFECTIVE MASS (SEE 'MASS SPECTRUM')
*EFFECTIVE POTENTIAL (APPROXIMATION, EFFECTIVE
POTENTIAL)
*EFFECTIVE RANGE (APPROXIMATION, EFFECTIVE RANGE)
*EFFICIENCY (COUNTERS AND DETECTORS, EFFICIENCY)
-EIGENSTATE (SEE 'ENERGY EIGENSTATE')
-EIGHTFOLD WAY (SYMMETRY, SU(3))
*EIKONAL ('APPROXIMATION, EIKONAL' OR 'REGGE CUT')
EINSTEINIUM
EJECTION
-ELASTIC CROSS SECTION (ELASTIC SCATTERING)
ELASTIC SCATTERING
-ELASTIC TOTAL CROSS SECTION (USE 'ELASTIC
SCATTERING, CHANNEL CROSS SECTION')
-ELASTICITY (ELASTIC SCATTERING, CHANNEL CROSS SECTION)
*ELECTRIC
ELECTRIC FIELD
ELECTRIC MOMENT
ELECTRICAL ENGINEERING
ELECTRICITY
-ELECTROEXCITATION
ELECTROFISSION (FISSION DUE TO ELECTRONS OR MUONS)
*ELECTROMAGNETIC
*ELECTROMAGNETIC COMPONENT (COSMIC RADIATION,
ELECTROMAGNETIC COMPONENT)
*ELECTROMAGNETIC DECAY (SEE ALSO 'RADIATIVE DECAY')
ELECTROMAGNETIC FIELD
-ELECTROMAGNETIC FORM FACTOR (USE 'FORM FACTOR')
ELECTROMAGNETIC INTERACTION (ALSO: 'MODEL,
ELECTROMAGNETIC INTERACTION')
-ELECTROMAGNETIC MIXING ('INTERFERENCE,
ELECTROMAGNETIC' (RESTRICTED USE))
ELECTRON (ALSO USED WHEN CHARGE IS IRRELEVANT)
ELECTRON ANTI-K0
ELECTRON ANTI-N
ELECTRON ANTI-P
ELECTRON ANTIBARYON
ELECTRON ANTIHYPERON
ELECTRON ANTILAMBDA
ELECTRON ANTINUCLEON
ELECTRON ANTISIGMA
ELECTRON ANTI-XI
ELECTRON BARYON
ELECTRON BARYON RESONANCE
ELECTRON BOSON
-ELECTRON COOLING (SEE 'BEAM DAMPING')
ELECTRON DEUTERON
ELECTRON ELECTRON (ALSO USED WHEN CHARGE IS
IRRELEVANT)
ELECTRON HADRON
ELECTRON HYPERON
ELECTRON INTERMEDIATE BOSON
ELECTRON K
ELECTRON K+
ELECTRON K-
ELECTRON K0
ELECTRON LAMBDA
ELECTRON LIGHT NUCLEUS
ELECTRON MESON
ELECTRON MESON RESONANCE
ELECTRON MUON
ELECTRON MUON+
ELECTRON MUON-
ELECTRON N
-ELECTRON NEUTRINO (FOR THE INTERACTION USE
'NEUTRINO ELECTRON'; FOR THE PARTICLE USE
'NEUTRINO/E/')

ELECTRON NUCLEON
ELECTRON NUCLEUS
ELECTRON OMEGA-
ELECTRON P
ELECTRON PI
ELECTRON PI+
ELECTRON PI-
ELECTRON PI0
ELECTRON POSITRON
ELECTRON QUARK
*ELECTRON RING ('ACCELERATOR, ELECTRON RING'
(NOT COUPLED WITH 'ION' OR 'HEAVY ION'))
ELECTRON SIGMA
ELECTRON SIGMA+
ELECTRON SIGMA-

ELECTRON SIGNAL
-ELECTRON SPECTROMETER (SEE 'MAGNETIC
SPECTROMETER')
ELECTRON SYNCHROTRON
ELECTRON VECTOR MESON
ELECTRON XI
ELECTRON XI-
ELECTRON XI0
-ELECTRONICS (USE MORE SPECIFIC KEYWORDS)
ELECTROPRODUCTION (NORMALLY USED WHEN
PARTICLES ARE PRODUCED BY ELECTRONS OR MUONS; FOR
 $Q^2=0$ SEE 'PHOTOPRODUCTION')
*ELECTROSTATIC
-ELECTROSTATIC ACCELERATOR (ACCELERATOR,
ELECTROSTATIC)
-ELECTROSTATIC SEPARATOR (USE 'PARTICLE SEPARATOR')
-ELEMENTARY LENGTH (SEE 'FUNDAMENTAL CONSTANT,
LENGTH')
ELEMENTS
EMISSION
-EMULSION CHAMBER (USE 'NUCLEAR EMULSION' AND
POSSIBLY 'TOTAL-ABSORPTION COUNTER')
-ENCODER (DIGITAL LOGIC)
ENERGY
*ENERGY DEPENDENCE
*ENERGY EIGENSTATE ('QUANTUM MECHANICS, ENERGY
EIGENSTATE' OR 'FIELD THEORY, ENERGY EIGENSTATE'
OR 'QUANTUM ELECTRODYNAMICS, ENERGY EIGENSTATE'.
NOT USED FOR ENERGY LEVELS OR EXCITED STATES.)
ENERGY LEVELS
ENERGY LOSS
*ENERGY RESOLUTION (COUNTERS AND DETECTORS,
ENERGY RESOLUTION)
ENERGY SPECTRUM
-ENERGY SPREAD (SEE 'ENERGY SPECTRUM')
*ENERGY-MOMENTUM (TENSOR, ENERGY-MOMENTUM)
-ENERGY-RANGE RELATION (ENERGY LOSS)
*ENHANCEMENT ('TOTAL CROSS SECTION,
ENHANCEMENT', 'DIFFERENTIAL CROSS SECTION,
ENHANCEMENT', 'CROSS SECTION, ENHANCEMENT'; SEE
ALSO 'MASS ENHANCEMENT')
EPSILON(1200)
-EQUAL-TIME COMMUTATOR ('CURRENT ALGEBRA,
COMMUTATION RELATIONS' OR 'FIELD THEORY,
COMMUTATION RELATIONS')
-EQUILIBRIUM (SEE 'STATISTICAL MECHANICS' OR
'THERMODYNAMICS')
*EQUIVALENT PHOTON (APPROXIMATION, EQUIVALENT
PHOTON)
ERBIUM
*EREVAN ES
*ERICSON FLUCTUATIONS (STATISTICS, ERICSON
FLUCTUATIONS)
-ETA ETA1 MIXING (INTERFERENCE, ETA(549)-ETA(958))
*ETA(C) (POSTULATED PARTICLE, ETA(C))
-ETA(1070) (SEE 'S*(1000)')
ETA(549)
*ETA(549)-ETA(958)
-ETA(700-1000) (EPSILON(1200))
ETA(958)
*EUCLIDEAN (FIELD THEORY, EUCLIDEAN)
EUROPIUM
-EVAPORATION MODEL (MULTIPLE PRODUCTION)
-EVENT SELECTOR (SEE 'MICROPROCESSOR,
PREPROCESSING')
EXCHANGE
*EXCHANGE DEGENERACY (USED IN CONNECTION WITH
REGGE POLES)
-EXCHANGE INTERFERENCE (EXCHANGE, INTERFERENCE)
-EXCHANGE MODEL (EXCHANGE)
-EXCITATION (SEE 'EXCITED STATE' OR 'EXCITED
NUCLEUS')
EXCITED NUCLEUS
EXCITED STATE
*EXCLUSIVE REACTION (WITH PARTICLES, E.G.
'ELECTRON P, EXCLUSIVE REACTION'; IF NOT
POSSIBLE, 'MODEL, EXCLUSIVE REACTION')
*EXOTIC (COMBINATIONS USED: 'RESONANCE,
EXOTIC', 'MESON RESONANCE, EXOTIC', 'BARYON
RESONANCE, EXOTIC', 'ATOM, EXOTIC')
EXPANSION 1/N
*EXPERIMENTAL EQUIPMENT
*EXPERIMENTAL METHODS
*EXPERIMENTAL RESULTS
*EXTENDED PARTICLE (MODEL, EXTENDED PARTICLE)
*EXTENSIVE (SHOWERS, EXTENSIVE)
*EXTERNAL (SYMMETRY, EXTERNAL)
*EXTERNAL FIELD ('FIELD THEORY, EXTERNAL FIELD'
(RESTRICTED USE))

F
*F MESON DOMINANCE (MODEL, F MESON DOMINANCE)
F(1260)
F(1514)
F*
F**
-F/D RATIO (COUPLING CONSTANT, D/F RATIO)
-FABBRI PLOT (KINETICS)
*FACTORIZATION
-FADDEEV EQUATIONS (MANY-BODY PROBLEM)
*FANIN (FAST LOGIC, FANIN)
*FANOUT (FAST LOGIC, FANOUT)
FAST LOGIC (*FAST LOGIC, DECISION* OR *FAST LOGIC, TIME-OF-FLIGHT* OR *FAST LOGIC, COINCIDENCE* OR *FAST LOGIC, FANIN* OR *FAST LOGIC, FANOUT*)
FEEDBACK (USED ONLY IN CONNECTION WITH ACCELERATORS. IN OTHER CASES SEE *COUPLING*)
-FERMI COUPLING (USE *WEAK INTERACTION, CURRENT-CURRENT*)
*FERMI GAS (MODEL, FERMI GAS)
-FERMI INTERACTION (SEE *FERMION*)
-FERMI MOTION CORRECTION (USE *NUCLEAR PHYSICS, CORRECTION*)
-FERMI STATISTICS (FERMION, STATISTICS)
*FERMI-YANG (MODEL, FERMI-YANG)
FERMION
FERMION ANTI-K
FERMION ANTI-K0
FERMION ANTI-N
FERMION ANTI-P
FERMION ANTIBARYON
FERMION ANTI-FERMION
FERMION ANTHYPERCN
FERMION ANTILAMBDA
FERMION ANTINEUTRINO
FERMION ANTINUCLEON
FERMION ANTISIGMA
FERMION ANTIXI
FERMION BARYON
FERMION BARYON RESONANCE
FERMION BOSON
FERMION DEUTERON
FERMION ELECTRON
FERMION FERMION
FERMION HADRON
FERMION HYPERON
FERMION INTERMEDIATE BOSON
FERMION K
FERMION K+
FERMION K-
FERMION K0
FERMION LAMBDA
FERMION LIGHT NUCLEUS
FERMION MESON
FERMION MESON RESONANCE
-FERMION MODEL (*STATISTICS* AND *MODEL, FERMION*)
FERMION MUON
FERMION MUON+
FERMION MUON-
FERMION N
FERMION NEUTRINO
FERMION NUCLEON
FERMION NUCLEUS
FERMION OMEGA-
FERMION P
FERMION PI
FERMION PI+
FERMION PI-
FERMION PIO
FERMION POSITRON
FERMION QUARK
FERMION SIGMA
FERMION SIGMA+
FERMION SIGMA-
FERMION SIGMA0
FERMION VECTOR MESON
FERMION XI
FERMION XI-
FERMION XIO
FERMION
*FERROMAGNET (USE IN *MODEL, FERRIMAGNET*)
-FESR (SUM RULE, FINITE ENERGY)
*FEYNMAN (SCALING, FEYNMAN)
-FEYNMAN FLUID (USE *SCALING, FEYNMAN* OR *MODEL, FLUID*)
-FEYNMAN GAS (USE *SCALING, FEYNMAN* OR *MODEL, GAS*)
*FEYNMAN GAUGE (GAUGE FIELD THEORY, FEYNMAN GAUGE)
FEYNMAN GRAPH (RESTRICTED USE)

-FEYNMAN INTEGRAL (USE *FEYNMAN GRAPH*)
-FEYNMAN PATH (SEE *FIELD THEORY, PATH INTEGRAL* OR *PERTURBATION THEORY, PATH INTEGRAL*)
-FEYNMAN RULE (SEE *FEYNMAN GRAPH* OR *PERTURBATION THEORY*)
-FEYNMAN-KISSLINGER-RAVDAL MODEL (QUARK)
*FIBRE BUNDLE (FIELD THEORY, FIBRE BUNDLE)
FIELD EQUATIONS
FIELD THEORETICAL MODEL
FIELD THEORY (SEE ALSO *GAUGE FIELD THEORY* OR *FIELD THEORETICAL MODEL* OR *UNIFIED FIELD THEORY* OR *DUAL FIELD THEORY* OR *REGGEON FIELD THEORY*)
-FIERZ CROSSING SYMMETRY (MODEL, FOUR-FERMION INTERACTION)
FINAL STATE (RESTRICTED USE. EXAMPLES: 'FINAL STATE, (P 2PI)'; 'FINAL STATE, DIMUON')
FINAL-STATE INTERACTION
*FINE STRUCTURE (ATOMIC PHYSICS, FINE STRUCTURE)
*FINITE ENERGY (SUM RULE, FINITE ENERGY)
*FINITE MASS (SUM RULE, FINITE MASS)
*FINITE MOMENTUM
*FIREBALL (MODEL, FIREBALL)
FISSION
-FIT (*INTERPRETATION OF EXPERIMENTS, ...* OR *STATISTICAL ANALYSIS, ...*. THESE TERMS ARE SPECIFIED BY THE ADDITIVES. FOR NEW METHODS *DATA ANALYSIS METHOD* IS USED)
-FIXED POINT (SEE *RENORMALIZATION GROUP* OR *RENORMALIZATION GROUP, CALLAN-SYMANZIK)
*FIXED POLE (MODEL, FIXED POLE)
*FIXED-ANGLE
-FIXED-T DISPERSION RELATIONS (DISPERSION RELATIONS)
*FLASH TUBE (SPARK CHAMBER, FLASH TUBE)
*FLAVOR (QUARK, FLAVOR)
*FLAVOR CHANGING (SEE *CURRENT, FLAVOR CHANGING*)
*FLUID (ONLY USE FOR *MODEL, FLUID*. OTHERWISE USE *LIQUID*)
-FLUID ANALOGY (USE *MODEL, FLUID*)
FLUORINE
FLUX
-FNL (*PROTON SYNCHROTRON; FOR EXPERIMENTAL RESULTS SEE 'BATAVIA PS')
*FOLDY-WOUTHUYSEN (TRANSFORMATION, FOLDY-WOUTHUYSEN)
*FORBUSH (COSMIC RADIATION, FORBUSH)
FORCES
FORM FACTOR (IF APPROPRIATE, SPECIFIERS ARE ADDED (EXAMPLE: 'FORM FACTOR, MAGNETIC'); NO SPECIFIER IS USED FOR ELECTROMAGNETIC FORM FACTORS)
*FORMULA (SEE ALSO *MASS FORMULA*)
*FORWARD SCATTERING (USED ONLY FOR ZERO-DEGREE SCATTERING, OTHERWISE SEE '..., SMALL-ANGLE')
-FORWARD-BACKWARD SYMMETRY (USE *ANGULAR DISTRIBUTION*)
*FOUR-COMPONENT NEUTRINO (MODEL, FOUR-COMPONENT NEUTRINO)
*FOUR-DIMENSIONAL (SEE *FIELD THEORY, FOUR-DIMENSIONAL*) OR *QUANTUM ELECTRODYNAMICS, FOUR-DIMENSIONAL*) OR *QUANTUM CHROMODYNAMICS, FOUR-DIMENSIONAL*) OR *QUANTUM FLAVORDYNAMICS, FOUR-DIMENSIONAL*)
*FOUR-FERMION INTERACTION (MODEL, FOUR-FERMION INTERACTION)
FOUR-PI-DETECTOR (RESTRICTED USE, FREQUENTLY USED FOR COLLIDING-BEAM DETECTORS)
*FRAGMENTATION (*BEAM, FRAGMENTATION* OR *TARGET, FRAGMENTATION* OR, MORE GENERAL, *MULTIPLE PRODUCTION, FRAGMENTATION*)
-FRAGMENTATION REGION (SEE *FRAGMENTATION*)
FRANCIUM
*FRASCATI ES
*FRASCATI STOR
-FREDHOLM OPERATOR (NOT USED)
*FRED
-FREQUENCY GENERATION (SEE *MICROWAVES*)
-FREQUENCY MEASUREMENT (SEE *MICROWAVES*)
*FRIEDMAN (MODEL, FRIEDMAN)
-FRITZSCH-GELL-MANN (LIGHT CONE BEHAVIOR)
*FROISSART BOUND (HIGH ENERGY BEHAVIOR, FROISSART BOUND)
*FROISSART-GRIBOV (PARTIAL WAVE, FROISSART-GRIBOV)
*FURINI-FURLAN (MODEL, FUBINI-FURLAN)
FUNCTIONAL ANALYSIS
FUNDAMENTAL CONSTANT
FUNDAMENTAL LENGTH (FUNDAMENTAL CONSTANT, LENGTH)
FUSION
F1(1540)

*G PARITY (QUANTUM NUMBER, G PARITY)
G(1680)
-G-2 (MAGNETIC MOMENT)
GADOLINIUM
-GALILEI GROUP (SEE "GROUP THEORY")
GALLIUM
-GAMMA MONOCHROMATOR (PHOTON, MONOCHROMATIC BEAM)
-GAMMA SPECTROMETER (TOTAL-ABSORPTION COUNTER)
GAS (SEE ALSO "MODEL, GAS")
-GAS ANALOG MODEL (USE "MODEL, GAS")
-GASEOUS SCINTILLATORS (USE "SCINTILLATION COUNTER, GAS")
*GATE (LINEAR GATE; "ANALOG CIRCUIT", LOGIC GATE; "DIGITAL LOGIC, GATE")
*GAUGE ("INVARIANCE, GAUGE" OR "TRANSFORMATION, GAUGE"; SEE ALSO "GAUGE FIELD THEORY")
GAUGE FIELD THEORY
*GEEL LINAC
*GEIGER-MUELLER ("COUNTERS AND DETECTORS, GEIGER-MUELLER")
*GELL-MANN-LOW (RENORMALIZATION GROUP, GELL-MANN-LOW)
*GELL-MANN-OAKES-RENNER ("MODEL, GELL-MANN-OAKES-RENNER")
*GELL-MANN-OKUBE ("MODEL, GELL-MANN-OKUBO" OR "MASS FORMULA, GELL-MANN-OKUBO")
-GELL-MANN-SHARP-WAGNER (COUPLING, PI-RHO(765)-CMECA(784))
*GELL-MANN-ZWEIG (QUARK, GELL-MANN-ZWEIG)
*GENERAL (RELATIVITY THEORY, GENERAL)
-GENERALIZED VECTOR DOMINANCE (MODEL, VECTOR DOMINANCE)
*GEOMETRICAL (SCALING, GEOMETRICAL)
*GEORGI-GLASHOW (MODEL, GEORGI-GLASHOW)
GERMANIUM
-GERMANIUM DETECTOR (SEE "SOLID-STATE COUNTER")

-GERMANIUM-LITHIUM COUNTER (SOLID-STATE COUNTER)
-GIANT RESONANCE (EXCITED NUCLEUS, COLLECTIVE PHENOMENA)
-GIM (MODEL, GLASHOW-ILIOPOULOS-MAIANI)
*GLASGOW LINAC (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
*GLASHOW-ILIOPOULOS-MAIANI (MODEL, GLASHOW-ILIOPOULOS-MAIANI)
GLASS
*GLAUBER (MODEL, GLAUBER)
-GLAUBER-MARGOLIS MODEL (MODEL, GLAUBER)
GLUON
GLUON GLUON
GLUON PARTON
GOLD
-GOLDBERGER-TREIMAN RELATION ("MODEL, PCAC" AND "PI, DECAY")
-GOLDSTONE BOSON (FIELD THEORY, GOLDSTONE THEOREM)
-GOLDSTONE MODEL (USE "SYMMETRY, SPONTANEOUSLY BROKEN")
*GOLDSTONE THEOREM (FIELD THEORY, GOLDSTONE THEOREM)
*GRASSMANN (ALGEBRA, GRASSMANN)
GRAVITATION
-GRAVITATIONAL RADIATION (GRAVITATION, RADIATION)
-GRAVITATIONAL WAVES (GRAVITATION, RADIATION)
*GRAVITINO (POSTULATED PARTICLE, GRAVITINO)
*GRAVITON (POSTULATED PARTICLE, GRAVITON)
-GREEN FUNCTION (SEE "N-POINT FUNCTION" OR "VERTEX FUNCTION" OR "PROPAGATOR")
*GRIBOV (MODEL, GRIBOV)
-GRIBOV-POMERANCHUK (PARTIAL WAVE, ANALYTIC PROPERTIES)
GROUP THEORY
-GUPTA-BLEULER (QUANTUM ELECTRODYNAMICS)

G

H
H(2050)
HADRON
HADRON ANTI-K
HADRON ANTI-K0
HADRON ANTI-N
HADRON ANTI-P
HADRON ANTIBARYON
HADRON ANTIHYPERON
HADRON ANTILAMBDA
HADRON ANTINUCLEON
HADRON ANTISIGMA
HADRON ANTXI
HADRON BARYON
HADRON BARYON RESONANCE
HADRON BOSON
HADRON DEUTERON
HADRON HADRON
HADRON HYPERON
HADRON INTERMEDIATE BOSON
HADRON K
HADRON K+
HADRON K-
HADRON K0
HADRON LAMBDA
HADRON LIGHT NUCLEUS
HADRON MESON
HADRON MESON RESONANCE
-HADRON MODEL (MODEL, HADRON)
HADRON N
HADRON NUCLEON
HADRON NUCLEUS
HADRON OMEGA-
HADRON P
HADRON PI
HADRON PI+
HADRON PI-
HADRON PIO
HADRON QUARK
-HADRON RESONANCE ("MESON RESONANCE" AND
"BARYON RESONANCE")
HADRON SIGMA
HADRON SIGMA+
HADRON SIGMA-
HADRON SIGMA0
HADRON SPECTROSCOPY (NOT USED FOR APPARATUS)
HADRON VECTOR MESON
HADRON XI
HADRON XI-
HADRON XIO
*HADRONIC
*HADRONIC ATOM
*HADRONIC COMPONENT (COSMIC RADIATION, HADRONIC
COMPONENT)
*HADRONIC DECAY (USE FOR STRONG DECAYS ONLY;
OTHERWISE SEE "NUELEPTONIC DECAY")
*HADROPRODUCTION
HAFNIUM
-HAGEDORN MODEL (MODEL, THERMODYNAMICAL)
-HAGEDORN-FRAUTSCHI (SEE "ECOTSTRAP")
*HAN-NAMBU (USE "QUARK, HAN-NAMBU")
*HARARI (MODEL, HARARI)
-HARARI-FREUND MODEL (SEE "EQUALITY")
-HARARI-ROSNER MODEL (SEE "EQUALITY")
*HARD CORE (MODEL, HARD CORE)
-HARD MESON (CURRENT ALGEBRA, EFFECTIVE
LAGRANGIANS)
-HARD PHOTON (RADIATIVE CORRECTION)
-HARD PICN (CURRENT ALGEBRA, EFFECTIVE LAGRANGIANS)
-HARD SCATTERING (SEE "MODEL, PARTON" OR
"MODEL, CONSTITUENT INTERCHANGE")
-HARMONIC OSCILLATOR (MODEL, OSCILLATOR)
*HARTREE-FOCK ("APPROXIMATION, HARTREE-FOCK"
FOR SELF-CONSISTENT CALCULATIONS IN QUANTUM
MECHANICS)
HEALTH PHYSICS (SEE ALSO "NUCLEAR MEDICINE" OR
"DOSEMETRY")
HEAT ENGINEERING
*HEAVY
*HEAVY ION (HEAVY-ION PHYSICS IS INCLUDED WHEN
PARTICLE ENERGY IS ≥ 100 MEV/NUCLEON. HEAVY-ION
ACCELERATOR TECHNOLOGY IS GENERALLY INCLUDED)
HEAVY LEPTON
-HEAVY-LEPTON ANTINEUTRINO (ANTINEUTRINO/L)
-HEAVY-LEPTON NEUTRINO (NEUTRINO/L)
-HEAVY MESON (SEE "PSI MESONS" OR "UPSILON MESONS")
-HEAVY WATER (DEUTERON, WATER)
*HEISENBERG ("FIELD THEORETICAL MODEL, HEISENBERG")
-HEISENBERG MODEL (USE "FIELD THEORETICAL
MODEL, HEISENBERG" OR "MODEL, FERROMAGNET")
HELICITY
HELIUM
-HIDDEN VARIABLES (QUANTUM MECHANICS)
*HIGGS (MODEL, HIGGS)
*HIGGS PARTICLE (POSTULATED PARTICLE, HIGGS
PARTICLE)
-HIGGS-KIBBLE (FIELD THEORETICAL MODEL, WEINBERG)
*HIGH (MOMENTUM TRANSFER, HIGH)
*HIGH ENERGY BEHAVIOR (ONLY FOR THEORETICAL
MODELS; USED ONLY WHEN HIGH ENERGY BEHAVIOR IS
NOT IMPLICATED BY OTHER KEYWORDS GIVEN)
-HIGH SPIN (SPIN, HIGH)
*HIGH-Y ANOMALY ("NEUTRINO, INCLUSIVE
REACTION", "ANTINEUTRINO, INCLUSIVE REACTION" AND
"INCLUSIVE REACTION, HIGH-Y ANOMALY")
*HIGHER-ORDER (RESTRICTED USE, PREFERABLY WITH
INTERACTIONS, E.G. "WEAK INTERACTION,
HIGHER-ORDER" OTHERWISE WITH FIELD THEORY- "FIELD
THEORY, HIGHER-ORDER", ALSO "MAGNETIC MOMENT,
HIGHER-ORDER" (FROM SIXTH ORDER ON. NOT USED FOR
K0 ANTI-K0))
-HILBERT SPACE (USE "LINEAR SPACES")
HOODSCOPE
-HOODSCOPE CHAMBER (SEE "SPARK CHAMBER, FLASH
TUBE")
HOLMIUM
*HWA (MODEL, HWA)
-HYBRID MODEL ("MODEL, ABSORPTION" AND "REGGE
POLES")
HYBRID SYSTEM (USED ONLY WHEN 2 OR MORE
CHAMBER TYPES ARE USED IN ONE DETECTOR; WHEN
BUBBLE CHAMBERS ARE INVOLVED, ADD "BUBBLE
CHAMBER")
*HYDRODYNAMICAL (MODEL, HYDRODYNAMICAL)
HYDROGEN
*HYPERCHARGE ("QUANTUM NUMBER, HYPERCHARGE".
SEE ALSO "STRANGENESS")
HYPERFINE STRUCTURE
HYPERFRAGMENT
-HYPERNUCLEUS (HYPERFRAGMENT)
HYPERON
HYPERON ANTIHYPERON
HYPERON BARYON RESONANCE
HYPERON DEUTERON
HYPERON HYPERON
HYPERON INTERMEDIATE BOSON
HYPERON LIGHT NUCLEUS
HYPERON NUCLEUS
HYPERON QUARK
HYPERON VECTOR MESON
*HYPERONIC ATOM

*IIZUKA-OKUBO-ZWEIG (SELECTION RULE,
IIZUKA-OKUBO-ZWEIG)
*IMAGE INTENSIFIER
*IMPACT PARAMETER (MODEL, IMPACT PARAMETER)
*IMPULSE (APPROXIMATION, IMPULSE)
-IMPURITY (SEE 'ADMIXTURE')
-INCLUSIVE PRODUCTION
INCLUSIVE REACTION
*INCOHERENT INTERACTION
*INCOHERENT PRODUCTION
*INDEFINITE METRIC ('FIELD THEORY, INDEFINITE
METRIC' OR 'AXIOMATIC FIELD THEORY, INDEFINITE
METRIC')
*INDEPENDENT EMISSION (MODEL, INDEPENDENT EMISSION)
*INDEPENDENT PARTICLE (MODEL, INDEPENDENT PARTICLE)
INDIUM
*INELASTIC SCATTERING
INFINITE-COMPONENT WAVE EQUATION (CURRENT
ALGEBRA, INFINITE-COMPONENT WAVE EQUATION)
-INFRAPARTICLE (SEE 'FIELD THEORY, INFRARED
PROBLEM' OR 'QUANTUM ELECTRODYNAMICS, INFRARED
PROBLEM')
*INFRARED PROBLEM ('FIELD THEORY, INFRARED
PROBLEM' OR 'QUANTUM ELECTRODYNAMICS, INFRARED
PROBLEM')
INJECTION
INORGANIC COMPOUNDS
-INSTABILITY (SEE 'BEAM INSTABILITY')
-INTEGRAL REPRESENTATION (USE 'SPECTRAL
REPRESENTATION')
*INSTANTON (FIELD EQUATIONS, INSTANTON)
-INTENSITY (SEE 'YIELD' OR 'FLUX')
*INTERACTION (RESTRICTED USE)
INTERFACE (ALSO 'DIGITAL LOGIC, INTERFACE' OR
'ANALOG LOGIC, INTERFACE' OR 'COMPUTER,
INTERFACE' OR 'INTERFACE, EXPERIMENTAL EQUIPMENT')
INTERFERENCE
INTERMEDIATE BOSON (SEE ALSO 'POSTULATED
PARTICLE, W+' OR 'POSTULATED PARTICLE, W-' OR
'POSTULATED PARTICLE, Z0')
-INTERMEDIATE NUCLEUS (USE 'EXCITED NUCLEUS')
-INTERMEDIATE STATE (SEE 'EXCHANGE' OR 'FINAL
STATE' OR 'CASCADE DECAY')
*INTERNAL (SYMMETRY, INTERNAL)
-INTERNAL CONVERSION (SEE 'PARTICLE SOURCE' OR
'NUCLEAR REACTION')
-INTERNUCLEAR CASCADE (USE 'NUCLEUS, CASCADE')
*INTERPRETATION OF EXPERIMENTS
*INTRANUCLEAR CASCADE (MODEL, INTRANUCLEAR CASCADE)
*INTRODUCTORY (RESTRICTED USE, MOSTLY IN
'REVIEW, INTRODUCTORY')
INVARIANCE
-INVARIANT PHASE SPACE (MODEL, STATISTICAL)
*INVERSE (SCATTERING, INVERSE)
IODINE
ION (SEE ALSO 'HEAVY ION')
-ION RING ACCELERATOR (ACCELERATOR, ELECTRON RING)
IONIZATION
-IONIZATION CALORIMETER ('IONIZATION CHAMBER'
AND 'BEAM CALIBRATION'; SEE ALSO
'TOTAL-ABSORPTION COUNTER')
IONIZATION CHAMBER
-IONIZATION SPECTROMETER (SEE 'IONIZATION CHAMBER')
-IPS (MODEL, STATISTICAL)
IRIDIUM
IRON
-IRON BALL (AT SPEAR; 'MAGNETIC DETECTOR, IRON
BALL')
*ISING (STATISTICAL MECHANICS, ISING)
*ISOBAR ('MODEL, ISOBAR'; FOR THE NUCLEON
ISOBAR USE 'NUCLEON RESONANCE')
-ISOBAR ANALOG RESONANCE (SEE 'NUCLEAR PHYSICS')
*ISOCHRONOUS (CYCLOTRON, ISOCHRONOUS)
*ISOSCALAR
ISOSPIN
-ISOTOPE (NUCLIDE)
*ISOVECTOR
-ISR ('STORAGE RING, P P'; FOR EXPERIMENTAL
RESULTS USE 'CERN STOR')

-J(3100) (USE 'J/PSI(3100)')
J/PSI(3100)
-JACOB-SLANSKY (MODEL, MULTIPLE PRODUCTION)
*JADE (AT PETRA: 'MAGNETIC DETECTOR, JADE')
JET
*JIN-MARTIN BOUND (HIGH ENERGY BEHAVIOR,
JIN-MARTIN BOUND)
-JOHNSON-BAKER-WILLEY (QUANTUM ELECTRODYNAMICS)
*JOHNSON-TREIMAN ("SYMMETRY, JOHNSON-TREIMAN"
AND "SYMMETRY, SU(6)")

*JOINT DECAY
*JONA-LASINIO-NAMBU (MODEL, JONA-LASINIO-NAMBU)
*JOSEPHSON (EFFECT, JOSEPHSON)
-JOST FUNCTION (POTENTIAL SCATTERING)
-JOST-LEHMANN-DYSON REPRESENTATION (SPECTRAL
REPRESENTATION)
-JWKB (USE 'APPROXIMATION, WKB')

K HYPERON
K INTERMEDIATE BOSON
K- K-
K LAMBDA
K LIGHT NUCLEUS
K MESON RESONANCE
K- N
K- NUCLEON
K- NUCLEUS
K- P
K- QUARK
K- VECTOR MESON
-KAELLEN-LEHMANN REPRESENTATION (SPECTRAL
REPRESENTATION)
-KAPPA(1250) (USE 'PI K, PARTIAL WAVE')
*KEK PS (AT TSUKUBA, JAPAN)
*KHARKOV LINAC
-KHURI REPRESENTATION (MODEL, REGGE POLES)
-KIBBLE-HIGGS (FIELD THEORETICAL MODEL, WEINBERG)
-KICKER MAGNET (PULSED MAGNET)
*KIKKAWA-SAKITA-VIRASORO (MODEL,
KIKKAWA-SAKITA-VIRASORO)
-KINEMATIC SUPERSTRUCTURE (DUALITY)
KINEMATICS
*KINK (FIELD EQUATIONS, KINK)
-KINK SOLUTION (USE 'FIELD EQUATIONS, KINK')
*KLEIN-GORDON (FIELD EQUATIONS, KLEIN-GORDON)
-KLYSTRON (SEE 'RF SYSTEM')
*KNO (SCALING, KNO)
-KOBA-NIELSEN (MODEL, DUAL RESONANCE)
-KOBA-NIELSEN-OLESEN SCALING (SCALING, KNO)
-KOGUT-SUSSKIND (USE 'MODEL, PARTON')
*KORTEWEG-DE VRIES (FIELD EQUATIONS,
KORTEWEG-DE VRIES)
-KROLL-RUDERMAN (FIELD THEORY, LOW-ENERGY THEOREM)
KRYPTON
-KUTI-WEISSKOPF (SEE 'MODEL, QUARK PARTON' AND
'SCALING' AND 'DEEP INELASTIC SCATTERING')
KO
KO ANTI-KO
KO ANTI-N
KO ANTI-P
KO ANTIBARYON
KO ANTIMUCLEON
KO BARYON
KO BARYON RESONANCE
KO DEUTERON
KO INTERMEDIATE BOSON
KO K+
KO K-
KO KO
KO LAMBDA
KO LIGHT NUCLEUS
KO MESON RESONANCE
KO N
KO NUCLEON
KO NUCLEUS
KO P
KO QUARK
KO VECTOR MESON
KO(L)
*KO(L)-KO(S) (MASS DIFFERENCE, KO(L)-KO(S))
KO(S)

K

L(1770)
*LADDER (APPROXIMATION, LADDER)
-LAGRANGIAN MODEL (FIELD THEORY)
-LAGRANGIAN FIELD THEORY (FIELD THEORY)
-LAMB SHIFT ('RADIATIVE CORRECTION' AND 'ATOM ENERGY LEVELS'. POSSIBLY ALSO: 'QUANTUM ELECTRODYNAMICS, VALIDITY TEST')
LAMBDA
LAMBDA ANTILAMBDA
LAMBDA BARYON RESONANCE
LAMBDA DEUTERON
LAMBDA INTERMEDIATE BOSON
LAMBDA LAMBDA
LAMBDA LIGHT NUCLEUS
LAMBDA NUCLEUS
LAMBDA QUARK
LAMBDA SIGMA
LAMBDA VECTOR MESON
LAMBDA(1405)
LAMBDA(1520)
LAMBDA(1670)
LAMBDA(1690)
LAMBDA(1815)
LAMBDA(1830)
LAMBDA(2100)
LAMBDA(2350)
LAMBDA(2585)
LAMBDA/C(2260)
*LAMOTON (SEE 'HEAVY LEPTON' AND 'STRONG INTERACTION')
*LAMPF LINAC (AT LOS ALAMOS)
*LANDAU GAUGE (GAUGE FIELD THEORY, LANDAU GAUGE)
-LANDAU MODEL (MCDEL, HYDRODYNAMICAL)
LANTHANUM
*LASER (GENERALLY, 'OPTICS, LASER')
*LATTICE ('FIELD THEORY, LATTICE' OR 'APPROXIMATION, LATTICE')
-LATTICE FIELD THEORY (SEE 'FIELD THEORY, LATTICE')
LAWRENCEUM
LEAD
-LEAD-CLASS COUNTER (SEE 'TOTAL-ABSORPTION COUNTER')
*LEADING LOGARITHM (APPROXIMATION, LEADING LOGARITHM)
*LEADING PARTICLE (MULTIPLE PRODUCTION, LEADING PARTICLE)
-LEAST-SQUARES ANALYSIS (USE 'STATISTICAL ANALYSIS')
LECTURES
*LEE (FIELD THEORETICAL MODEL, LEE)
*LEFT-HANDED (CURRENT, LEFT-HANDED)
-LEFT-RIGHT SYMMETRY (SEE 'MULTIPLE PRODUCTION, CORRELATION')
-LEHMANN ELLIPSE (ANALYTIC PROPERTIES)
-LEHMANN-KAELLEN-UMEZAWA (SPECTRAL REPRESENTATION)
-LEHMANN-SYMANZIK-ZIMMERMANN FORMALISM (FIELD THEORY)
*LENGTH ('FUNDAMENTAL CONSTANT, LENGTH'; SEE ALSO 'SCATTERING LENGTH' OR 'RADIATION LENGTH')
*LENINGRAD IOPPE CYCL
*LENINGRAD NUCL INST CYCL
LEPTON
LEPTON ANTI-K0
LEPTON ANTI-N
LEPTON ANTI-P
LEPTON ANTIBARYON
LEPTON ANTIMUON
LEPTON ANTILAMBDA
LEPTON ANTI-LEPTON
LEPTON ANTINEUTRINO
LEPTON ANTINUCLEON
LEPTON ANTISIGMA
LEPTON ANTI-XI
LEPTON BARYON
LEPTON BARYON RESONANCE
LEPTON BOSON
LEPTON DEUTERON
LEPTON ELECTRON
LEPTON NEUTRINO
LEPTON HADRON
LEPTON HYPERON
LEPTON INTERMEDIATE BOSON
LEPTON K
LEPTON K+
LEPTON K-
LEPTON KO
LEPTON LAMBDA
LEPTON LEPTON
LEPTON LIGHT NUCLEUS
LEPTON MESON

LEPTON MESON RESONANCE
LEPTON MUON
LEPTON MUON+
LEPTON MUON-
LEPTON N
LEPTON NUCLEON
LEPTON NUCLEUS
LEPTON OMEGA-
LEPTON P
LEPTON PI
LEPTON PI+
LEPTON PI-
LEPTON PIO
LEPTON POSITRON
LEPTON QUARK
LEPTON SIGMA
LEPTON SIGMA+
LEPTON SIGMA-
LEPTON SIGMA0
LEPTON VECTOR MESON
LEPTON XI
LEPTON XI-
LEPTON XIO
*LEPTONIC
*LEPTONIC DECAY
-LEPTONIC NUMBER (USUALLY 'CONSERVATION LAW, LEPTON'; SEE ALSO 'QUANTUM NUMBER, LEPTON')
-LEPTONIC QUARK (QUARK, LEPTONIC)
*LEPTOPRODUCTION (SEE ALSO 'ELECTROPRODUCTION' OR 'NEUTRINOPRODUCTION')
-LEVEL CONVERTER (DIGITAL LOGIC)
-LEXAN (USE 'PLASTICS, TRACK SENSITIVE')
*LIE ('GROUP THEORY, LIE' OR 'ALGEBRA, LIE')
*LIFETIME (PARTICLE, LIFETIME)
-LIGHT CONE ALGEBRA (LIGHT CONE BEHAVIOR)
LIGHT CONE BEHAVIOR
LIGHT NUCLEUS (UP TO MASS NUMBER 20 (INCL.))
LIGHT NUCLEUS INTERMEDIATE BOSON
LIGHT NUCLEUS LIGHT NUCLEUS
LIGHT NUCLEUS NUCLEUS
LIGHT NUCLEUS QUARK
-LIMITER (FAST LOGIC)
-LIMITING FRAGMENTATION (MODEL, FRAGMENTATION)
LINEAR ACCELERATOR
-LINEAR AMPLIFIER (ANALOG CIRCUIT)
-LINEAR GATE (ANALOG CIRCUIT)
*LINEAR SPACES (FUNCTIONAL ANALYSIS, LINEAR SPACES)
-LIPPMANN-SCHWINGER EQUATION (QUANTUM MECHANICS, SCATTERING)
-LIPPMANN-SCHWINGER-ZIMMERMANN FORMALISM (AXIOMATIC FIELD THEORY)
LIQUID
-LIQUID ANALOGY MODEL (USE 'MODEL, FLUID')
LIQUID ARGON DETECTOR
LITHIUM
-LOCALITY (AXIOMATIC FIELD THEORY)
-LOCALIZATION (AXIOMATIC FIELD THEORY)
-LOCATION DETECTION (SEE 'POSITION SENSITIVE' OR 'TRACK DATA ANALYSIS')
-LOGIC (IF DIGITAL, 'DIGITAL LOGIC'; IF IN NANOSECOND RANGE, 'FAST LOGIC')
-LOGIC GATE (DIGITAL LOGIC)
*LONG-RANGE (USE ONLY AS 'CORRELATION, LONG-RANGE'. DO NOT USE FOR LONG-RANGE FORCES)
*LONGITUDINAL (RESTRICTED USE. SEE ALSO 'LONGITUDINAL MOMENTUM')
-LONGITUDINAL BEAM OSCILLATION (SYNCHROTRON OSCILLATION)
LONGITUDINAL MOMENTUM
*LONGITUDINAL PHASE SPACE (MULTIDIMENSIONAL ANALYSIS, LONGITUDINAL PHASE SPACE)
-LOOP DIAGRAM ('FIELD THEORY, HIGHER-ORDER' OR 'DUAL FIELD THEORY, HIGHER-ORDER' OR 'PERTURBATION THEORY, HIGHER-ORDER')
*LORENTZ ('GROUP THEORY, LORENTZ' (RESTRICTED USE) OR 'INVARIANCE, LORENTZ' (RESTRICTED USE) OR 'TRANSFORMATION, LORENTZ')
-LOS ALAMOS LINAC (USE 'LAMPF LINAC', ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
*LOW (MOMENTUM TRANSFER, LOW)
LOW TEMPERATURE
*LOW-ENERGY THEOREM (FIELD THEORY, LOW-ENERGY THEOREM)
-LPS ANALYSIS ('MULTIPLE PRODUCTION, LONGITUDINAL PHASE SPACE' OR 'MULTIDIMENSIONAL ANALYSIS, LONGITUDINAL PHASE SPACE')
-LSZ FORMALISM (FIELD THEORY)
LUMINOSITY
*LUND ES
LUTETIUM

*M I T LINAC
*MAC (AT PEP: "MAGNETIC DETECTOR, MAC")
MAGNESIUM
MAGNET
*MAGNETIC (SEE ALSO "MAGNETIC FIELD" OR
"MAGNETIC MOMENT" OR "POSTULATED PARTICLE,
MAGNETIC MONOPOLE" OR "MAGNETIC SPECTROMETER" OR
"MAGNETIC DETECTOR")
MAGNETIC DETECTOR (OFTEN USED CONNECTED WITH
THE NAME OF THE DETECTOR. IN CASE OF LARGE-ANGLE
DETECTORS SEE ALSO APPROPRIATE KEYWORDS FOR
CHAMBERS AND ADD "MAGNETIC FIELD". FOR
SMALL-ANGLE DETECTORS SEE ALSO "MAGNETIC
SPECTROMETER")
-MAGNETIC CHARGE (CHARGE, MAGNETIC)
MAGNETIC FIELD (ALSO FOR STORAGE-RING
EXPERIMENTS WHEN APPLICABLE)
MAGNETIC MOMENT
*MAGNETIC MONOPOLE (POSTULATED PARTICLE,
MAGNETIC MONOPOLE)
MAGNETIC SPECTROMETER (SEE ALSO "MAGNETIC
DETECTOR")
*MAGNETOSTRICTIVE (SPARK CHAMBER, MAGNETOSTRICTIVE)
MANDELSTAM REPRESENTATION
MANGANESE
MANUAL
MANY-BODY PROBLEM
*MANY-BOSON (EXCHANGE, MANY-BOSON)
*MARK I (AT SPEAR; "MAGNETIC DETECTOR, MARK I")
*MARK II (AT SPEAR; "MAGNETIC DETECTOR, MARK II")
*MARK J (AT PETRA; "MAGNETIC DETECTOR, MARK J")
MASS
MASS DIFFERENCE
MASS ENHANCEMENT
MASS FORMULA
*MASS GENERATION (FIELD THEORY, MASS GENERATION)
#MASS NUMBER
MASS RATIO
-MASS SPECTROMETER (SEE "MAGNETIC SPECTROMETER")
MASS SPECTRUM (RESTRICTED USE)
-MASS SPLITTING (MASS DIFFERENCE)
-MASS-ZERO PIONS (PI, MASSLESS)
*MASSIVE
*MASSLESS
-MATERIALS (SEE MORE SPECIFIC TERMS)
MATHEMATICAL METHODS
MATHEMATICS
MATTER
-MAXIMUM-LIKELIHOOD METHOD (USE "STATISTICAL
ANALYSIS")
MEASUREMENT
MECHANICAL ENGINEERING
MECHANICS
-MEDICINE (SEE "HEALTH PHYSICS" OR "NUCLEAR
MEDICINE")
-MELLIN TRANSFORMATION (TRANSFORMATION)
-MELOSH (TRANSFORMATION, MELOSH)
-MEMBRAN MODEL (SEE "MODEL, BAG")
-MEMORY (COMPUTER)
 MENDEL
 MERCURY
*MERON (FIELD EQUATIONS, MERON)
-MERON SOLUTION (USE "FIELD EQUATIONS, MERON")
*MESIC ATOM
-MESIC MOLECULE (MOLECULE, MESIC ATOM)
 MESON (ALSO "MODEL, MESON")
 MESON ANTI-K
 MESON ANTI-K0
 MESON ANTI-N
 MESON ANTI-P
 MESON ANTIBARYON
 MESON ANTHYPERON
 MESON ANTILAMBDA
 MESON ANTINUCLEON
 MESON ANTISIGMA
 MESON ANTIXI
 MESON BARYON
 MESON BARYON RESONANCE
 MESON BOSON
 MESON DEUTERON
*MESON DOMINANCE ("MODEL, MESON DOMINANCE".
 USED FOR SCALAR, PSEUDOSCALAR AND TENSOR MESONS)
-MESON EXCHANGE (EXCHANGE, MESON)
-MESON FACTORY (FOR ACCELERATOR ASPECTS SEE
 "SYNCHRO-CYCLOTRON" OR "LINEAR ACCELERATOR, P",
 FOR RESULTS GAINED THERE, SEE "LAMPF LINAC",
 "TRIUMF CYCL", "SIN CYCL")
 MESON HYPERON
 MESON INTERMEDIATE BOSON
 MESON K
 MESON K+
 MESON K-
 MESON K0
MESON LAMBDA
MESON LIGHT NUCLEUS
MESON MESON
MESON MESON RESONANCE
MESON N
MESON NUCLEON
MESON NUCLEUS
MESON OMEGA-
MESON P
MESON PI
MESON PI+
MESON PI-
MESON PIO
MESON QUARK
MESON RESONANCE
MESON RESONANCE ANTI-N
MESON RESONANCE ANTI-P
MESON RESONANCE ANTIBARYON
MESON RESONANCE ANTIHYPERON
MESON RESONANCE ANTILAMBDA
MESON RESONANCE ANTINUCLEON
MESON RESONANCE ANTISIGMA
MESON RESONANCE ANTIXI
MESON RESONANCE BARYON
MESON RESONANCE BARYON RESONANCE
MESON RESONANCE DEUTERON
-MESON RESONANCE FORMATION (USE "MESON
 RESONANCE, SCATTERING")
MESON RESONANCE HYPERON
MESON RESONANCE LAMBDA
MESON RESONANCE LIGHT NUCLEUS
MESON RESONANCE MESON RESONANCE
MESON RESONANCE N
MESON RESONANCE NUCLEON
MESON RESONANCE NUCLEUS
MESON RESONANCE OMEGA-
MESON RESONANCE P
MESON RESONANCE QUARK
MESON RESONANCE SIGMA
MESON RESONANCE SIGMA+
MESON RESONANCE SIGMA-
MESON RESONANCE SIGMA0
MESON RESONANCE VECTOR MESON
MESON RESONANCE XI
MESON RESONANCE XI-
MESON RESONANCE XIO
MESON SIGMA
MESON SIGMA+
MESON SIGMA-
MESON SIGMA0
MESON VECTOR MESON
MESON XI
MESON XI-
MESON XIO
METAL
-MICA DETECTOR (USE "MINERAL, TRACK SENSITIVE")
-MICROCAUSALITY (AXIOMATIC FIELD THEORY, CAUSALITY)
-MICROCOMPUTER (SEE "MICROPROCESSOR")
MICROPROCESSOR
-MICROTRON (CYCLOTRON, ELECTRON)
MICROWAVES
MINERAL
-MINKOWSKI SPACE (FIELD THEORY)
*MISSING-MASS
-MISSING-MASS SPECTROMETER (MAGNETIC SPECTROMETER)
-MIXING ("INTERFERENCE" (RESTRICTED USE))
*MIXING ANGLE (MULTIPLET, MIXING ANGLE)
MODEL (VERY RESTRICTED USE WITHOUT SECOND TERM)
-MODELS OF FIELD THEORY (FIELD THEORETICAL MODEL)
-MOEBIUS TRANSFORMATION (TRANSFORMATION)
-MOELLER SCATTERING (USE "ELECTRON ELECTRON,
 ELASTIC SCATTERING" OR "POSITRON POSITRON,
 ELASTIC SCATTERING")
MOLECULAR BIOLOGY
*MOLECULAR PHYSICS
*MOLECULE
 MOLYBDENUM
MOMENT
MOMENTUM
*MOMENTUM RESOLUTION (COUNTERS AND DETECTORS,
 MOMENTUM RESOLUTION)
MOMENTUM SPECTRUM
MOMENTUM TRANSFER
MONITORING (SEE ALSO "BEAM MONITORING")
*MONOCHROMATIC BEAM (PHOTON, MONOCHROMATIC BEAM)
*MONOPOLE (FIELD EQUATIONS, MONOPOLE)
-MONOPOLE SOLUTION (USE "FIELD EQUATIONS,
 MONOPOLE")
*MONTE CARLO (NUMERICAL CALCULATIONS, MONTE CARLO)
*MOSCOW ITEF PS
*MOSCOW LINAC
*MOSCOW RI PS
*MUELLER (MODEL, MUELLER)

M

M
*MULTI-REGGE (REGGE POLES, MULTI-REGGE)
-MULTICHANNEL ANALYZER (SEE "ANALOG-TO-DIGITAL CONVERTER")
MULTIDIMENSIONAL ANALYSIS
*MULTIGLUON (EXCHANGE, MULTICLUON)
-MULTILOOP ("FIELD THEORY, HIGHER-ORDER" OR "DUAL FIELD THEORY, HIGHER-ORDER")
*MULTIMESON (EXCHANGE, MULTIMESON)
-MULTIPARTICLE SCATTERING (SEE "MANY-BODY PROBLEM" OR "MULTIPLE PRODUCTION" BUT NOT "MULTIPLE SCATTERING")
*MULTIPERIPHERAL (MODEL, MULTIPERIPHERAL)
*MULTIPROTON ("EXCHANGE, MULTIPROTON" AND "PERTURBATION THEORY")
*MULTIPION (EXCHANGE, MULTIPION)
*MULTIPLE
 MULTIPLE PRODUCTION
 MULTIPLE SCATTERING
 MULTIPLET
 MULTIPLEXITY
 MULTIPLEXY CHARGED
*MULTIPOLE (PARTIAL WAVE ANALYSIS, MULTIPOLE)
-MULTIPRONOUN (USE "POMECH")
-MULTIREGGEGE (SEE "REGGE POLES, MULTI-REGGE" OR "EXCHANGE, MULTI-REGGE")
-MULTIWIRE PROPORTIONAL CHAMBER (USE "PROPORTIONAL CHAMBER")
MUON
MUON ANTI-K0
MUON ANTI-N
MUON ANTI-P
MUON ANTIBARYON
MUON ANTIHYPERON
MUON ANTILAMBDA
MUON ANTINUCLEON
MUON ANTISIGMA
MUON ANTIXI
MUON BARYON
MUON BARYON RESONANCE
MUON BOSON
MUON DEUTERON
MUON HADRON
MUON HYPERON
MUON INTERMEDIATE BOSON
MUON K
MUON K+
MUON K-
MUON K0
MUON LAMBDA
MUON LIGHT NUCLEUS
MUON MESON
MUON MESON RESONANCE
MUON MUON
MUON MUON+
MUON MUON-
MUON N
-MUON NEUTRINO (FOR THE INTERACTION USE "NEUTRINO"; FOR THE PARTICLE USE "NEUTRINO/MU/")
MUON NUCLEON
MUON NUCLEUS
MUON OMEGA-
MUON P
MUON PI
MUON PI+
MUON PI-
MUON PIO
MUON QUARK
MUON SIGMA
MUON SIGMA+
MUON SIGMA-
MUON SIGMA0
MUON VECTOR MESON
MUON XI
MUON XI-
MUON XIO
MUON+
MUON+ ANTI-K0
MUON+ ANTI-N
MUON+ ANTI-P
MUON+ ANTIBARYON
MUON+ ANTIHYPERON
MUON+ ANTILAMBDA
MUON+ ANTINUCLEON
MUON+ ANTISIGMA
MUON+ ANTIXI

MUON+ BARYON
MUON+ BARYON RESONANCE
MUON+ BOSON
MUON+ DEUTERON
MUON+ HADRON
MUON+ HYPERON
MUON+ INTERMEDIATE BOSON
MUON+ K
MUON+ K+
MUON+ K-
MUON+ K0
MUON+ LAMBDA
MUON+ LIGHT NUCLEUS
MUON+ MESON
MUON+ MESON RESONANCE
MUON+ MUON+
MUON+ MUON-
MUON+ N
MUON+ NUCLEON
MUON+ NUCLEUS
MUON+ OMEGA-
MUON+ P
MUON+ PI
MUON+ PI+
MUON+ PI-
MUON+ PIO
MUON+ QUARK
MUON+ SIGMA
MUON+ SIGMA+
MUON+ SIGMA-
MUON+ SIGMA0
MUON+ VECTOR MESON
MUON+ XI
MUON+ XI-
MUON+ XIO
MUON-
MUON- ANTI-K0
MUON- ANTI-N
MUON- ANTI-P
MUON- ANTIBARYON
MUON- ANTIHYPERON
MUON- ANTILAMBDA
MUON- ANTINUCLEON
MUON- ANTISIGMA
MUON- ANTIXI
MUON- BARYON
MUON- BARYON RESONANCE
MUON- BOSON
MUON- DEUTERON
MUON- HADRON
MUON- HYPERON
MUON- INTERMEDIATE BOSON
MUON- K
MUON- K+
MUON- K-
MUON- K0
MUON- LAMBDA
MUON- LIGHT NUCLEUS
MUON- MESON
MUON- MESON RESONANCE
MUON- MUON-
MUON- N
MUON- NUCLEON
MUON- NUCLEUS
MUON- OMEGA-
MUON- P
MUON- PI
MUON- PI+
MUON- PI-
MUON- PIO
MUON- QUARK
MUON- SIGMA
MUON- SIGMA+
MUON- SIGMA-
MUON- SIGMA0
MUON- VECTOR MESON
MUON- XI
MUON- XI-
MUON- XIO
*MUONIC ATOM (ONLY USED IN CASE OF VALIDITY TEST OF QED)
*MUONIUM
-MUONPRODUCTION (USE "ELECTROPRODUCTION")
-MWPC (USE "PROPORTIONAL CHAMBER")

N (DENOTES NEUTRON; FOR NUCLEON USE "NUCLEON")
N ANTI-N
N ANTIHYPERON
N ANTILAMBDA
N ANTISIGMA
N ANTIXI
N BARYON RESONANCE
N DEUTERON
N HYPERON
N INTERMEDIATE BOSON
N LAMBDA
N LIGHT NUCLEUS
N N
N NUCLEUS
N OMEGA-
-N P (USE "P N, ... AND "N, BEAM")
N QUARK
N SIGMA
N SIGMA+
N SIGMA-
N SIGMAO
N VECTOR MESON
N XI
N XI-
N XIO
N(1470)
N(1520)
N(1535)
N(1670)
N(1688)
N(1700)
N(1780)
N(1810)
N(2190)
N(2220)
N(2650)
N(3030)
-N* (SEE "NUCLEON RESONANCE" FOR I=1/2)
-N-PION EXCHANGE (EXCHANGE, MULTIPION)
N-POINT FUNCTION
-N/D METHOD (PARTIAL WAVE, DISPERSION RELATIONS)
-NAKANISHI REPRESENTATION (SPECTRAL REPRESENTATION)
-NAMBU (FIELD THEORETICAL MODEL)
-NAMBU-GOLDSTONE (USE "SYMMETRY, SPONTANEOUSLY BROKEN")
-NANOSECOND ELECTRONICS (FAST LCCIC)
*NARROW RESONANCE ("APPROXIMATION, NARROW RESONANCE"; SEE ALSO "PSI MESONS" OR MORE SPECIFIC PARTICLES)
NEGATIVE PARTICLE
NEODYMIUM
NEON
NEPTUNIUM
-NEUTRAL (SEE "NEUTRAL CURRENT" OR "NEUTRAL PARTICLE")
NEUTRAL CURRENT
NEUTRAL PARTICLE
-NEUTRAL WEAK CURRENT (NEUTRAL CURRENT)
-NEUTRALS (USE "NEUTRAL PARTICLE")
NEUTRINO
NEUTRINO ANTI-K0
NEUTRINO ANTI-N
NEUTRINO ANTI-P
NEUTRINO ANTIBARYON
NEUTRINO ANTICLUSTER
NEUTRINO ANTILAMBDA
NEUTRINO ANTINEUTRINO
NEUTRINO ANTINUCLEON
NEUTRINO ANTISIGMA
NEUTRINO ANTIXI
NEUTRINO BARYON
NEUTRINO BARYON RESONANCE
NEUTRINO BOSON
NEUTRINO DEUTERON
NEUTRINO ELECTRON
NEUTRINO HADRON
NEUTRINO HYPERON
NEUTRINO INTERMEDIATE BOSON
NEUTRINO K
NEUTRINO K+
NEUTRINO K-
NEUTRINO KO
NEUTRINO LAMBDA
NEUTRINO LEPTON
NEUTRINO LIGHT NUCLEUS
NEUTRINO MESON
NEUTRINO MESON RESONANCE
NEUTRINO MUON
NEUTRINO MUON+
NEUTRINO MUON-
NEUTRINO N
NEUTRINO NEUTRINO
NEUTRINO NUCLEON
NEUTRINO NUCLEUS
NEUTRINO OMEGA-
NEUTRINO P
NEUTRINO PI
NEUTRINO PI+
NEUTRINO PI-
NEUTRINO PIO
NEUTRINO POSITRON
NEUTRINO QUARK
NEUTRINO SIGMA
NEUTRINO SIGMA+
NEUTRINO SIGMA-
NEUTRINO SIGMAO
NEUTRINO VECTOR MESON
NEUTRINO XI
NEUTRINO XI-
NEUTRINO XIO
NEUTRINO/E/
NEUTRINO/L/ (USE FOR THE HEAVY-LEPTON NEUTRINO)
NEUTRINO/M/
NEUTRINO/TAU/
*NEUTRINO PRODUCTION (USED FOR PRODUCTION BY NEUTRINOS OR ANTINEUTRINOS)
-NEUTRON (USE "N")
-NEUTRON DETECTION (PARTICLE IDENTIFICATION, N)
-NFVU-SCHWARZ MODEL (MODEL, DUAL RESONANCE)
*NEW ELEMENT (ELEMENT, NEW ELEMENT)
*NEW INTERACTION ("MODEL, NEW INTERACTION". VERY RESTRICTED USE)
NEW PARTICLE
NICKEL
*NIMROD PS (AT CHILTON)
*NINA CS (AT DARESBURY)
NIOBIUM
NITROGEN
*NIU (POSTULATED PARTICLE, NIU)
NOBELIUM
-NOETHER'S THEOREM ("GROUP THEORY" AND "CONSERVATION LAW")
*NONABELIAN ("FIELD THEORY, NONABELIAN"; NOT USED TOGETHER WITH "GAUGE FIELD THEORY, YANG-MILLS")
*NONDIFFRACTIVE
*NONLEPTONIC DECAY (USED FOR WEAK DECAYS ONLY)
*NONLINEAR
*NONLOCAL (SEE "FIELD THEORY, NONLOCAL")
*NONPERTURBATIVE
*NONPOLYNOMIAL (FIELD THEORETICAL MODEL, NONPOLYNOMIAL)
*NONRELATIVISTIC
*NONRENORMALIZABLE (FIELD THEORETICAL MODEL, NONRENORMALIZABLE)
*NONSTRANGE (RESONANCE, NONSTRANGE)
-NORMAL PRODUCT (NOT USED)
*NOVA (MODEL, NOVA)
*NOVOSIBIRSK STAR
*NOVOSIBIRSK STAR2
*NOVOSIBIRSK STAR3
*NOVOSIBIRSK STAR4
-NUCLEAR CASCADE (NUCLEUS, CASCADE)
NUCLEAR EMULSION
-NUCLEAR EMULSION CHAMBER (USE "NUCLEAR EMULSION" AND POSSIBLY "TOTAL-ABSORPTION COUNTER")
NUCLEAR ENGINEERING
NUCLEAR FORCE
NUCLEAR MATTER
NUCLEAR MEDICINE
NUCLEAR MODEL (RESTRICTED USE) NUCLEAR-MODEL PAPERS ARE NOT GENERALLY INCLUDED)
NUCLEAR PHYSICS
NUCLEAR PROPERTIES
NUCLEAR REACTION
-NUCLEAR RESONANCE (SEE "EXCITED NUCLEUS")
-NUCLEAR STRUCTURE (SEE "NUCLEAR PROPERTIES" OR "NUCLEAR MODEL")
NUCLEON
NUCLEON ANTI-N
NUCLEON ANTIHYPERON
NUCLEON ANTILAMBDA
NUCLEON ANTINUCLEON
NUCLEON ANTISIGMA
NUCLEON ANTIXI
NUCLEON BARYON RESONANCE
NUCLEON DEUTERON
NUCLEON HYPERON
NUCLEON INTERMEDIATE BOSON
-NUCLEON ISOBAR (NUCLEON RESONANCE)
*NUCLEON J/PSI (3100)
NUCLEON LAMBDA
NUCLEON LIGHT NUCLEUS
NUCLEON N
NUCLEON NUCLEON
NUCLEON NUCLEUS

N

N
NUCLEON OMEGA-
NUCLEON QUARK
NUCLEON RESONANCE
-NUCLEON RESONANCE FORMATION (USE "NUCLEON
RESONANCE, SCATTERING")
NUCLEON SIGMA
NUCLEON SIGMA+
NUCLEON SIGMA-
NUCLEON SIGMA0
NUCLEON VECTOR MESON
NUCLEON XI
NUCLEON XI-
NUCLEON XI0

NUCLEUS
NUCLEUS INTERMEDIATE BOSON
NUCLEUS NUCLEUS
NUCLEUS QUARK
NUCLIDE
-NUMERICAL ANALYSIS (NUMERICAL CALCULATIONS,
INTERPRETATION OF EXPERIMENTS)
*NUMERICAL CALCULATIONS (GENERALLY ACCOMPANIED
BY SPECIFICATION; THE COMBINATION 'INTERPRETATION
OF EXPERIMENTS, NUMERICAL CALCULATIONS' IS USED
FOR NUMERICAL ANALYSES)
NUMERICAL MATHEMATICS

* $O(N)$ (*SYMMETRY, $O(N)$ * OR *GROUP THEORY, $O(N)$ * OR *FIELD THEORY, $O(N)$ * OR *GAUGE FIELD THEORY, $O(N)$)
* $O(3)$ (*SYMMETRY, $O(3)$ * OR *GROUP THEORY, $O(3)$ * OR *FIELD THEORY, $O(3)$ * OR *GAUGE FIELD THEORY, $O(3)$)*
* $O(3,1)$ (*SYMMETRY, $O(3,1)$ * OR *GROUP THEORY, $O(3,1)$ * OR *FIELD THEORY, $O(3,1)$ * OR *GAUGE FIELD THEORY, $O(3,1)$)*
* $O(4)$ (*SYMMETRY, $O(4)$ * OR *GROUP THEORY, $O(4)$ * OR *FIELD THEORY, $O(4)$ * OR *GAUGE FIELD THEORY, $O(4)$)*
* $O(4,2)$ (*SYMMETRY, $O(4,2)$ * OR *GROUP THEORY, $O(4,2)$ * OR *FIELD THEORY, $O(4,2)$ * OR *GAUGE FIELD THEORY, $O(4,2)$)*
*OAK RIDGE LINAC
-OBEC (EXCHANGE, ONE-BOSON)
*OCTET (QUARK, OCTET)
*OCTET DOMINANCE (MODEL, OCTET DOMINANCE)
*OCTONION (ALGEBRA, OCTONION)
-OCTUPOLLE LENS (OCTUPOLLE LENS, SPECIAL FOCUSING)
*OFF-LINE (TRACK DATA ANALYSIS, OFF-LINE)
-OFF-MASS-SHELL (MODEL, OFF-SHELL)
*OFF-SHELL (MODEL, OFF-SHELL)
-OKUBO-ZWEIG RULE (USE *SELECTION RULE,
IZUKA-OKUBO-ZWEIG*)
-OKUBO-ZWEIG-IZUKA RULE (USE *SELECTION RULE,
IZUKA-OKUBO-ZWEIG*)
*OMEGA (AT CERN; *MAGNETIC DETECTOR, OMEGA*)
-OMEGA SPECTROMETER (SEE *MAGNETIC SPECTROMETER*)
OMEGA(1675)
OMEGA(784)
*OMEGA(784)-PHI(1019) (INTERFERENCE,
OMEGA(784)-PHI(1019))
OMEGA-
OMEGA- ANTIOMEGA-
OMEGA- BARYON RESONANCE
OMEGA- DEUTERON
OMEGA- INTERMEDIATE BOSON
OMEGA- LIGHT NUCLEUS
OMEGA- NUCLEUS
OMEGA- CMEGA-
OMEGA- QUARK
OMEGA- VECTOR MESON
-OMEGA-PHI INTERFERENCE (INTERFERENCE,
OMEGA(784)-PHI(1019))
-OMEGA-RHO INTERFERENCE (INTERFERENCE,
PHI(765)-CMCA(784))
*ON-LINE (*COMPUTER, ON-LINE* (NOT FOR PAPERS
CONTAINING EXPERIMENTAL RESULTS, EXCEPT WHEN
PARTICULARS ARE GIVEN))
-ON-MASS-SHELL (MODEL, ON-SHELL)
*ON-SHELL (MODEL, ON-SHELL)
*ONE-BOSON (EXCHANGE, ONE-BOSON)
*ONE-DIMENSIONAL (SEE *FIELD THEORY,
ONE-DIMENSIONAL* OR *QUANTUM ELECTRODYNAMICS,
ONE-DIMENSIONAL* OR *QUANTUM CHROMODYNAMICS,
ONE-DIMENSIONAL* OR *QUANTUM FLAVORDYNAMICS,
ONE-DIMENSIONAL)
-ONE-LOOP APPROXIMATION (*FEYNMAN GRAPH,
HIGHER-ORDER* OR *DUAL FIELD THEORY,
HIGHER-ORDER*)
*ONE-MESON (EXCHANGE, ONE-MESON)
*ONE-PARTICLE (EXCHANGE, ONE-PARTICLE)
*ONE-PHOTON (EXCHANGE, ONE-PHOTON)
*ONE-PION (EXCHANGE, ONE-PION)
*ONE-VECTOR MESON (EXCHANGE, ONE-VECTOR MESON)
-OPACITY (SEE *ABSORPTION* OR *MODEL, OPTICAL*)
-OPE (EXCHANGE, ONE-PION)
-OPE MODEL (EXCHANGE, ONE-PION)
*OPERATOR ALGEBRA (RESTRICTED USE)
-OPERATOR PRODUCT (FIELD THEORY, OPERATOR
PRODUCT EXPANSION)
*OPERATOR PRODUCT EXPANSION (FIELD THEORY,
OPERATOR PRODUCT EXPANSION)
*OPTICAL (MODEL, OPTICAL)
*OPTICAL THEOREM (TOTAL CROSS SECTION, OPTICAL
THEOREM)
OPTICS
ORBIT
-ORBIT CALCULATIONS (SEE *BEAM OPTICS* AND *ORBIT*
ORGANIC COMPOUNDS
*ORSAY CYCL
*ORSAY LINAC
*ORSAY STOR
*OSCILLATION (NEUTRINO, OSCILLATION)
*OSCILLATOR (MODEL, OSCILLATOR)
OSMUM
-OVERLAP FUNCTION (DO NOT USE *OVERLAPPING
RESONANCES*)
*OVERLAPPING RESONANCES (MODEL, OVERLAPPING
RESONANCES)
OXYGEN

P
P ANTI-N
P ANTIHYPERON
P ANTILAMBDA
P ANTINUCLEON
P ANTISIGMA
P ANTI χ
P BARYON
P DEUTERON
P HYPERON
P INTERMEDIATE BOSON
-P INVARIANCE (INVARIANCE, PARITY)
P LAMBDA
P LIGHT NUCLEUS
P N
P NUCLEON
P NUCLEUS
P OMEGA-
P P
P QUARK
P SIGMA
P SIGMA+
P SIGMA-
P SIGMA σ
P VECTOR MESON
P χ_1
P χ_1^-
P χ_0
-P-WAVE (PARTIAL WAVE)
*PADE (APPROXIMATION, PADE)
PAIR
*PAIR PRODUCTION
PALLADIUM
-PARACHARMONIUM (SEE 'CHARMNUIM')
*PARAMETRIZATION (FOR FUNCTIONAL FITS USE
'INTERPRETATION OF EXPERIMENTS, PARAMETRIZATION'
OR 'NUMERICAL MATHEMATICS, PARAMETRIZATION' OR
'STATISTICAL ANALYSIS, PARAMETRIZATION')
*PARASTATISTICS (STATISTICS, PARASTATISTICS)
PARITY
-PARITY CHECK (DIGITAL LOGIC)
PARTIAL WAVE

P

PI SIGMA+
PI SIGMA-
PI SIGMA0
PI VECTOR MESON
PI XI
PI XI-
PI XIO
-PI(1640) (A3(1640))
-PI(975) (DELTA(970))
PI+
PI+ ANTI-K0
PI+ ANTI-N
PI+ ANTI-P
PI+ ANTIBARYON
PI+ ANTIHYPERON
PI+ ANTILAMBDA
PI+ ANTINUCLEON
PI+ ANTISIGMA
PI+ ANTIXI
PI+ BARYON
PI+ BARYON RESONANCE
PI+ DEUTERON
PI+ HYPERON
PI+ INTERMEDIATE BOSON
PI+ K
PI+ K+
PI+ K-
PI+ KO
PI+ LAMBDA
PI+ LIGHT NUCLEUS
PI+ MESON RESONANCE
PI+ N
PI+ NUCLEON
PI+ NUCLEUS
PI+ OMEGA-
PI+ P
PI+ PI+
PI+ PI-
PI+ QUARK
PI+ SIGMA
PI+ SIGMA+
PI+ SIGMA-
PI+ SIGMA0
PI+ VECTOR MESON
PI+ XI
PI+ XI-
PI+ XIO
PI-
PI- ANTI-K0
PI- ANTI-N
PI- ANTI-P
PI- ANTIBARYON
PI- ANTIHYPERON
PI- ANTILAMBDA
PI- ANTINUCLEON
PI- ANTISIGMA
PI- ANTIXI
PI- BARYON
PI- BARYON RESONANCE
PI- DEUTERON
PI- HYPERON
PI- INTERMEDIATE BOSON
PI- K
PI- K+
PI- K-
PI- KO
PI- LAMBDA
PI- LIGHT NUCLEUS
PI- MESON RESONANCE
PI- N
PI- NUCLEON
PI- NUCLEUS
PI- OMEGA-
PI- P
PI- PI-
PI- QUARK
PI- SIGMA
PI- SIGMA+
PI- SIGMA-
PI- SIGMA0
PI- VECTOR MESON
PI- XI
PI- XI-
PI- XIO
*PI-RHO(765)-OMEGA(784) (COUPLING,
PI-RHO(765)-CMEGA(784))
-PI/RHO(1540) (F1(1540))
-PION EXCHANGE ('EXCHANGE, ONE-PION' OR
"EXCHANGE, MULTIPION")
-PIONIC FORM FACTOR (VERTEX FUNCTION)
#PIONIZATION (MULTIPLE PRODUCTION, PIONIZATION)
*PITTSBURGH CYCL
PIO
PIO ANTI-K0
PIO ANTI-N
PIO ANTI-P
PIO ANTIBARYON
PIO ANTIHYPERON
PIO ANTILAMBDA
PIO ANTINUCLEON
PIO ANTISIGMA
PIO ANTIXI
PIO BARYON
PIO BARYON RESONANCE
PIO DEUTERON
PIO HYPERON
PIO INTERMEDIATE BOSON
PIO K
PIO K+
PIO K-
PIO KO
PIO LAMBDA
PIO LIGHT NUCLEUS
PIO MESON RESONANCE
PIO N
PIO NUCLEON
PIO NUCLEUS
PIO OMEGA-
PIO P
PIO PI+
PIO PI-
PIO PTO
PIO QUARK
PIO SIGMA
PIO SIGMA+
PIO SIGMA-
PIO SIGMA0
PIO VECTOR MESON
PIO XI
PIO XI-
PIO XIO
*PLANAR (FEYNMAN GRAPH, PLANAR)
PLASMA
-PLASTIC TRACK DETECTOR (SEE "PLASTICS, TRACK
SENSITIVE")
PLASTICS
PLATINUM
-PLOTTING METHODS (SEE "DATA ANALYSIS METHOD"
(RESTRICTED USE) OR "MULTIDIMENSIONAL ANALYSIS,
PRISM PLOT" OR "STATISTICAL ANALYSIS")
*PLUTO (AT DORIS AND PETRA; "MAGNETIC DETECTOR,
PLUTO")
PLUTONIUM
-POINCARE GROUP (GROUP THEORY, LORENTZ)
*POKORSKI-SATZ-SCHILLING (MODEL,
POKORSKI-SATZ-SCHILLING)
*POLARIZABILITY
POLARIZATION
*POLARIZED BEAM
*POLARIZED TARGET
*POLE (APPROXIMATION, POLE)
-POLE DOMINANCE ("MODEL, POLE" OR "MODEL,
RESONANCE")
POLONIUM
*POMERANCHUK THEOREM (TOTAL CROSS SECTION,
POMERANCHUK THEOREM)
POMERON (ALSO "POMERON, MULTI-REGGE")
-POMERON COUPLING (POMERON, COUPLING)
-POMERON EXCHANGE (POMERON, EXCHANGE)
-POMERON-POMERON COUPLING (POMERON, COUPLING)
-POMERON-POMERON-POMERON COUPLING (POMERON,
COUPLING)
*POSITION SENSITIVE (COUNTERS AND DETECTORS,
POSITION SENSITIVE)
POSITIVE PARTICLE
-POSITIVITY (SEE "AXIOMATIC FIELD THEORY")
POSITRON
POSITRON ANTI-K0
POSITRON ANTI-N
POSITRON ANTI-P
POSITRON ANTIBARYON
POSITRON ANTIHYPERON
POSITRON ANTILAMBDA
POSITRON ANTINUCLEON
POSITRON ANTISIGMA
POSITRON ANTIXI
POSITRON BARYON
POSITRON BARYON RESONANCE
POSITRON BOSON
POSITRON DEUTERON
POSITRON HADRON
POSITRON HYPERON
POSITRON INTERMEDIATE BOSON
POSITRON K
POSITRON K+
POSITRON K-

P
POSITRON K0
POSITRON LAMBDA
POSITRON LIGHT NUCLEUS
POSITRON MESON
POSITRON MESON RESONANCE
POSITRON MUON
POSITRON MUON+
POSITRON MUON-
POSITRON N
POSITRON NUCLEON
POSITRON NUCLEUS
POSITRON OMEGA-
POSITRON P
POSITRON PI
POSITRON PI+
POSITRON PI-
POSITRON PIO
POSITRON POSITRON
POSITRON QUARK
POSITRON SIGMA
POSITRON SIGMA+
POSITRON SIGMA-
POSITRON SIGMA0
POSITRON VECTOR MESON
POSITRON XI
POSITRON XI-
POSITRON XIO
POSITRONIUM
POSTULATED PARTICLE
POTASSIUM
POTENTIAL
-POTENTIAL MODEL (POTENTIAL SCATTERING)
POTENTIAL SCATTERING
POWER ENGINEERING
POWER SUPPLY
PRASEODYMIUM
-PREDICTION (PROPOSED EXPERIMENT, NUMERICAL CALCULATIONS)
PREPROCESSING (SEE ALSO "DIGITAL LOGIC, READOUT" OR "MICROPROCESSOR, PREPROCESSING" OR "DIGITAL LOGIC, PREPROCESSING")
*PRESSURE
*PRIMAKOFF (EFFECT, PRIMAKOFF)
*PRIMARY (USE IN "COSMIC RADIATION, PRIMARY")
-PRIMEVAL FIREBALL (ASTROPHYSICS)
*PRINCETON PS
*PRISM PLCT (MULTIDIMENSIONAL ANALYSIS, PRISM PLOT)
-PROBABILITY (STATISTICS)

-PROCESS CONTROL COMPUTER (COMPUTER, CONTROL SYSTEM)
*PRODUCTION (RESTRICTED USE, IF POSSIBLE USE MORE SPECIFIC TERM)
-PRODUCTION CROSS SECTION (CHANNEL CROSS SECTION, PRODUCTION)
PROGRAMMING
-PROJECT ("EXPERIMENTAL EQUIPMENT, PROPOSED" OR "ACCELERATOR, PROPOSED")
PROMETHIUM
-PROMPT PARTICLE (USE "DIRECT PRODUCTION")
PROPAGATOR
PROPORTIONAL CHAMBER (USED ALSO FOR PROPORTIONAL COUNTER)
-PROPORTIONAL COUNTER (PROPORTIONAL CHAMBER)
-PROPORTIONAL WIRE CHAMBER (PROPORTIONAL CHAMBER)
*PROPOSED ("EXPERIMENTAL EQUIPMENT, PROPOSED" OR "ACCELERATOR, PROPOSED")
PROPOSED EXPERIMENT
PROTACTINIUM
PROTON SYNCHROTRON
*PSEUDOPARTICLE (FIELD EQUATIONS, PSEUDOPARTICLE)
-PSEUDOPARTICLE SOLUTION (FIELD EQUATIONS, PSEUDOPARTICLE)
*PSEUDOSCALAR (RESTRICTED USE)
PSEUDOSCALAR MESON
-PSEUDOSCALAR MESON DOMINANCE (MODEL, MESON DOMINANCE)
*PSEUDOVECTOR ((RESTRICTED USE) WHEN "PSEUDOVECTOR" AND "VECTOR MESON" APPLICABLE, USE "VECTOR MESON" ONLY)
PSI MESONS (RESTRICTED TO THEORETICAL PAPERS ON PSI SPECTROSCOPY)
-PSI(3100) (USE "J/PSI(3100)")
PSI(3700)
PSI(3770)
PSI(4100) STRUCTURE
PSI(4400)
*PT ("INVARIANCE, PT" OR "VIOLATION, PT")
-PULSE ANALYZER (ANALOG-TO-DIGITAL CONVERTER)
-PULSE GENERATOR (NOT INCLUDED)
-PULSE LIMITER (FAST LOGIC)
-PULSE SHAPER (FAST LOGIC)
-PULSE SPECTROMETER ("MAGNETIC SPECTROMETER" AND "FAST LOGIC, COINCIDENCE" OR "SPARK CHAMBER")
-PULSE-HEIGHT ANALYZER (ANALOG-TO-DIGITAL CONVERTER)
PULSED MAGNET

Q

Q REGION
-QC/2 SPECTROMETER (MAGNETIC SPECTROMETER)
-QFD (QUANTUM FLAVORDYNAMICS)
-QFT (FIELD THEORY)
QUADRUPOLE LENS
-QUANTAMETER (SEE "IONIZATION CHAMBER" AND
"BEAM MONITORING")
QUANTIZATION
QUANTUM CHROMODYNAMICS
QUANTUM ELECTRODYNAMICS
-QUANTUM FIELD THEORY (USE "FIELD THEORY")
QUANTUM FLAVORDYNAMICS
QUANTUM MECHANICS
QUANTUM NUMBER
-QUANTUM STATISTICS (STATISTICAL MECHANICS)
QUARK
QUARK ANTIQUARK
QUARK GLUON (SEE ALSO "FIELD THEORY,
ASYMPTOTIC FREEDOM")
-QUARK LINE RULE (SELECTION RULE,
ITZUKA-OKUBO-ZWETIG)

-QUARK MODEL (QUARK)
*QUARK PARTON (MODEL, QUARK PARTON)
QUARK QUARK
-QUARK REARRANGEMENT (SEE "MODEL, CONSTITUENT
INTERCHANGE")
-QUARK RECOMBINATION (SEE "MODEL, CONSTITUENT
INTERCHANGE")
-QUARK SEARCH ("SEARCH FOR, QUARK". ONLY FOR
EXPERIMENTAL SEARCHES FOR QUARKS)
*QUARKONIUM (QUARK, QUARKONIUM)
*QUARTET (QUARK, QUARTET)
*QUASICLASSICAL (APPROXIMATION, QUASICLASSICAL)
-QUASIELASTIC SCATTERING (USE "ELASTIC SCATTERING")
-QUASIPARTICLE (SEE "MODEL, FERMI GAS")
*QUASIPOTENTIAL (MODEL, QUASIPOTENTIAL)
*QUATERNION (ALGEBRA, QUATERNION)
*QUINTET (QUARK, QUINTET)
 Q1(1300)
 Q2(1400)

R
RADIATION
-RADIATION DETECTOR (NOT USED. SEE MORE SPECIFIC KEYWORDS)
-RADIATION DOSE (SEE "DOSIMETRY")
-RADIATION EFFECT (SEE "RADIATION, EFFECT")
RADIATION LENGTH
RADIATION PROTECTION
*RADIATIVE CAPTURE
RADIATIVE CORRECTION
*RADIATIVE DECAY (SEE ALSO "ELECTROMAGNETIC DECAY")
RADIODACTIVITY
-RADIOCHEMISTRY ("RADIODACTIVITY" AND "CHEMISTRY")
RADEUM
RADON
-RANGE TELESCOPE (SEE "SCINTILLATION COUNTER" AND "ENERGY LOSS" AND "FAST LOGIC, COINCIDENCE")
-RANGE-ENERGY RELATION (USE "ENERGY LOSS")
-RAPID CYCLING BUBBLE CHAMBER (USE "BUBBLE CHAMBER")
*RAPIDITY
*RARITA-SCHWINGER (FIELD EQUATIONS.
RARITA-SCHWININGER)
*RATIO (SEE "TOTAL CROSS SECTION, RATIO" OR "WIDTH, RATIO" IF "MASS, RATIO")
-REACTION AMPLITUDE (SEE "SCATTERING AMPLITUDE" (RESTRICTED USE), ONLY IN CASES OF CENTRAL IMPORTANCE)
-REACTION MECHANISM (USE MORE SPECIFIC TERM)
*READOUT (DIGITAL LOGIC, READOUT)
-REAL TIME (SEE "CONTROL SYSTEM" AND "COMPUTER, ON-LINE")
RECOIL
*REFLECTION
*REGENERATION (KO, REGENERATION)
REGGE CUT ("MODEL, REGGE CLT"; ONLY FOR PAPERS TREATING MODELS)
REGGE POLES
-REGGE TRAJECTORIES (SEE "REGGE POLES")
-REGGEON (SEE "REGGE POLES" OR "REGGEON FIELD THEORY")
REGGEON FIELD THEORY
*REGGEON PARTICLE (SCATTERING, REGGEON PARTICLE)
*REGULARIZATION (RENORMALIZATION, REGULARIZATION)
*RELATIVISTIC
-RELATIVISTIC QUANTUM MECHANICS (QUANTUM MECHANICS, RELATIVISTIC)
RELATIVITY THEORY
*RENORMALIZABLE (FIELD THEORETICAL MODEL, RENORMALIZABLE)
RENORMALIZATION
RENORMALIZATION GROUP
-REPRESENTATION (SEE "GROUP THEORY" OR "MANDELSTAM REPRESENTATION" OR "SPECTRAL REPRESENTATION")
-REPRESENTATION THEORY (SEE "GROUP THEORY")
-REPULSION
-REPULSIVE CORE
-RESCATTERING (SEE "MULTIPLE SCATTERING")
-RESISTIVE-WALL EFFECT (SEE "BEAM INSTABILITY" OR "BEAM DYNAMICS")
*RESOLUTION (EXPERIMENTAL EQUIPMENT, RESOLUTION)
RESONANCE (RESTRICTED USE FOR "MODEL, RESONANCE")
*RESONANCE DOMINANCE (MODEL, RESONANCE DOMINANCE)
-RESONANCE FORMATION (USE "RESONANCE, SCATTERING")
-RESONANCE INTERACTION MODEL (MODEL, OVERLAPPING RESONANCES)
-RESONANCE MIXING (INTERFERENCE, RESONANCE)
*RESONANCE SCATTERING (MODEL, RESONANCE SCATTERING)
-RESONANCE SPECTROSCOPY ("HADRON SPECTROSCOPY"
OR "MULTIPLET")
REVIEW
-RF CAVITY (SEE "RF SYSTEM")
-RF FIELD (SEE "RF SYSTEM")
-RF SEPARATOR (USE "PARTICLE SEPARATOR" AND POSSIBLY "BEAM TRANSPORT")
RF SYSTEM
-RFT (REGGEON FIELD THEORY)
RHENIUM
-RHO DOMINANCE MODEL (MODEL, VECTOR DOMINANCE)
-RHO EXCHANGE (EXCHANGE, RHO(765))
*RHO(1250) (POSTULATED PARTICLE, RHO(1250))
RHO(1600)
-RHO(1660) (G(1680))
*RHO(1710) (POSTULATED PARTICLE, RHO(1710))
RHO(765)
RHO(765)+
RHO(765)-
*RHO(765)-OMEGA(784) (INTERFERENCE,
RHO(765)-OMEGA(784))
RHO(765)0
-RHO-OMEGA (INTERFERENCE, RHO(765)-OMEGA(784))
RHODIUM
*RIGHT-HANDED (CURRENT, RIGHT-HANDED)
-ROPER RESONANCE (N(1470))
*ROSENBLUTH FORMULA ("EXCHANGE, ONE-PHOTON" AND E.G., "ELECTRON P. ROSENBLUTH FORMULA")
-ROSS-STODOLSKY (RHO(765), PHOTOPRODUCTION)
-ROTATION
*ROTATIONAL (SYMMETRY, ROTATIONAL)
*ROTATIONAL STATE (MODEL, ROTATIONAL STATE)
#ROTATOR (MODEL, ROTATOR)
RUBBER
RUBIDIUM
RUTHENIUM

S

*S(1930) (POSTULATED PARTICLE, S(1930))
*S(1000)
S-MATRIX
-S-WAVE (PARTIAL WAVE)
#SACLAY LINAC
#SACLAY PS
SAFETY (FOR ASPECTS OTHER THAN NUCLEAR, SEE ALSO "HEALTH PHYSICS" OR "DOSIMETRY" OR "SHIELDING")
*SAKATA (MODEL, SAKATA)
-SALAM-STRAETHDEE (FIELD THEORY, SUPERSYMMETRY)
-SALAM-WEINBERG MODEL (FIELD THEORETICAL MODEL, WEINBERG)
SAMARIUM
-SANDWICH COUNTER (SEE, E.G., "SCINTILLATION COUNTER, LEAD" OR, E.G., "CHERENKOV COUNTER, IRON")
*SASKATOON LINAC
*SATellite (USED IN CONNECTION WITH COSMIC-RADIATION EXPERIMENTS)
-SAXON-WOODS ("POTENTIAL" OR "POTENTIAL SCATTERING")
*SCALAR (RESTRICTED USE)
SCALAR MESON
-SCALAR MESON DOMINANCE (MODEL, MESON DOMINANCE)
-SCALE INVARIANCE (USE "SCALING")
-SCALING (DIGITAL LOGIC)
SCALING (ALSO USED FOR SCALE INVARIANCE, FOR SCALING VIOLATION; "SCALING, VIOLATION")
-SCALING VIOLATION (SCALING, VIOLATION)
SCANDIUM
-SCANNING (SEE "TRACK MEASURING")
SCATTERING (RESTRICTED USE)
SCATTERING AMPLITUDE (RESTRICTED USE, ONLY FOR CASES OF CENTRAL IMPORTANCE; SEE ALSO S-MATRIX)
SCATTERING LENGTH
-SCC (CANAC SYSTEM, CONTROLLER)
*SCHROEDINGER EQUATION ("QUANTUM MECHANICS, SCHRÖDINGER EQUATION"; ONLY FOR PAPERS ON RELATIVISTIC QUANTUM MECHANICS)
*SCHWINGER (FIELD THEORETICAL MODEL, SCHWINGER)
-SCHWINGER SOURCE THEORY (FIELD THEORY)
*SCHWINGER TERMS (CURRENT ALGEBRA, SCHWINGER TERMS)
SCINTILLATION COUNTER
-SCINTILLATOR (NOT INCLUDED IN SCOPE)
*SCREENING (EFFECT, SCREENING)
*SEA (QUARK, SEA)
*SEAGULL (EFFECT, SEAGULL)
SEARCH FOR (ONLY FOR EXPERIMENTAL SEARCHES FOR POSTULATED PARTICLES)
SECOND QUANTIZATION (FIELD THEORY, QUANTIZATION)
*SECOND-CLASS CURRENT (WEAK INTERACTION, SECOND-CLASS CURRENT)
-SECONDARY PARTICLE
SECONDARY RADIATION
-SECONDARY-EMISSION MONITORING (EFAM MONITORING)
-SECTOR-FOCUSING CYCLOTRON (CYCLOTRON, ISOCRONOUS)
-SECURITY (SEE "SAFETY" OR "HEALTH PHYSICS" OR "DOSIMETRY" OR "SHIELDING" OR "RADIATION PROTECTION")
SELECTION RULE
SELENIUM
-SELF-CONSISTENT CALCULATION ("BOOTSTRAP" OR, IF QUANTUM MECHANICS, "APPROXIMATION, HARTREE-FOCK")
-SELF-CRUELING (NOT USED)
-SELF-ENERGY (PROPAGATOR, RENORMALIZATION)
-SELF-INTERACTION (RENORMALIZATION)
-SEMICLASSICAL (SEE "APPROXIMATION, QUASICLASSICAL" OR "APPROXIMATION, WKB")
SEMICONDUCTOR
SEMICONDUCTOR DETECTOR (SEE ALSO "SOLID-STATE COUNTER")
-SEMITINCLUSIVE REACTION (SEE "INCLUSIVE REACTION")
*SEMILEPTONIC DECAY
SENDAI LINAC
*SEPARABLE POTENTIAL (MODEL, SEPARABLE POTENTIAL)
*SEPARATED BEAM
*SEPARATED-ORBIT (CYCLOTRON, SEPARATED-ORBIT)
*SEPTET (QUARK, SEPTET)
-SEPTUM MAGNET (SEE "MAGNET, EJECTION")
SERIAL HIGHWAY (CANAC SYSTEM, SERIAL HIGHWAY)
SERPUKHOV PS
*SEXTET (QUARK, SEXTET)
-SEXTUPOLE LENS (QUADRUPOLE LENS, SPECIAL FOCUSING)
-SHADOW SCATTERING (SEE "MODEL, OPTICAL" OR "MODEL, VECTOR DOMINANCE")
*SHADOWING (EFFECT, SHADOWING)
*SHELL (MODEL, SHELL)
SHIELDING
*SHOCK WAVES (MODEL, SHOCK WAVES)
*SHORT-DISTANCE BEHAVIOR (FIELD THEORY, SHORT-DISTANCE BEHAVIOR)
*SHORT-RANGE (USED ONLY AS "CORRELATION, SHORT-RANGE". NOT USED FOR SHORT-RANGE FORCES)
-SHOWER COUNTER (USE "SHOWER DETECTOR")
SHOWER DETECTOR
-SHOWER SPECTROMETER (USE "SHOWER DETECTOR")
SHOWERS
-SHRINKAGE (HIGH ENERGY BEHAVIOR)
SIGMA (USED FOR THE HYPERON; ALSO "FIELD THEORETICAL MODEL, SIGMA")
SIGMA ANTISIGMA
SIGMA BARYON RESONANCE
SIGMA DEUTERON
SIGMA INTERMEDIATE BOSON
SIGMA LIGHT NUCLEUS
-SIGMA MODEL (FIELD THEORETICAL MODEL, SIGMA)
SIGMA NUCLEUS
SIGMA QUARK
-SIGMA TERM MODEL (USE "SYMMETRY, CHIRAL" AND, E.G., "MESON NUCLEON, INTERACTION")
SIGMA VECTOR MESON
SIGMA(1385)
SIGMA(1670)
SIGMA(1750)
SIGMA(1765)
SIGMA(1915)
SIGMA(1940)
SIGMA(2030)
SIGMA(2250)
SIGMA(2455)
SIGMA(2620)
SIGMA+
SIGMA+ BARYON RESONANCE
SIGMA+ DEUTERON
SIGMA+ INTERMEDIATE BOSON
SIGMA+ LIGHT NUCLEUS
SIGMA+ NUCLEUS
SIGMA+ QUARK
SIGMA+ SIGMA-
SIGMA+ SIGMA0
SIGMA+ VECTOR MESON
SIGMA-
SIGMA- BARYON RESONANCE
SIGMA- DEUTERON
SIGMA- INTERMEDIATE BOSON
SIGMA- LIGHT NUCLEUS
SIGMA- NUCLEUS
SIGMA- QUARK
SIGMA- VECTOR MESON
SIGMA/C(2430)
SIGMA0
SIGMA0 BARYON RESONANCE
SIGMA0 DEUTERON
SIGMA0 INTERMEDIATE BOSON
SIGMA0 LIGHT NUCLEUS
SIGMA0 NUCLEUS
SIGMA0 QUARK
SIGMA0 SIGMA-
SIGMA0 VECTOR MESON
SILICON
SILVER
*SIN CYCL
*SINF-GORDON ("FIELD EQUATIONS, SINE-GORDON" OR "QUANTUM MECHANICS, SINE-GORDON")
-SINGLE (FOR SINGLE PARTICLES SEE "ONE-PARTICLE", "ONE-MESON" ETC.)
-SINGLE PARTICLE (SEE "ONE-PARTICLE"; ALSO "INCLUSIVE REACTION")
-SINGLE-ARM SPECTROMETER (SEE "MAGNETIC SPECTROMETER")
-SINGLE-LOOP APPROXIMATION ("FEYNMAN GRAPH, HIGHER-ORDER" OR "DUAL FIELD THEORY, HIGHER-ORDER")
*SIX-DIMENSIONAL (SEE "FIELD THEORY, SIX-DIMENSIONAL" OR "QUANTUM ELECTRODYNAMICS, SIX-DIMENSIONAL" OR "QUANTUM CHROMODYNAMICS, SIX-DIMENSIONAL" OR "QUANTUM FLAVORDYNAMICS, SIX-DIMENSIONAL")
-SKELETON (FEYNMAN GRAPH)
*SL(2,C) ("SYMMETRY, SL(2,C)" OR "GROUP THEORY, SL(2,C)" OR "FIELD THEORY, SL(2,C)" OR "GAUGE FIELD THEORY, SL(2,C)")
*SLAC LINAC (AT STANFORD)
*SLAC PEP STAR (AT STANFORD)
*SLAC SPEAR STAR (AT STANFORD)
*SLAVNOV IDENTITY (GAUGE FIELD THEORY, SLAVNOV IDENTITY)
-SLAVNOV-TAYLOR IDENTITY (GAUGE FIELD THEORY, SLAVNOV IDENTITY)
*SMALL-ANGLE
-SMOKATRON (ACCELERATOR, ELECTRON RING)
*SO(N) ("SYMMETRY, SO(N)" OR "GROUP THEORY, SO(N)" OR "FIELD THEORY, SO(N)" OR "GAUGE FIELD THEORY, SO(N)")

S
*SO(2,2) ("SYMMETRY, SO(2,2)" OR "GROUP THEORY,
SO(2,2)" OR "FIELD THEORY, SO(2,2)" OR "GAUGE
FIELD THEORY, SO(2,2)")
*SO(3) ("SYMMETRY, SO(3)" OR "GROUP THEORY,
SO(3)" OR "FIELD THEORY, SO(3)" OR "GAUGE FIELD
THEORY, SO(3)")
*SO(4) ("SYMMETRY, SO(4)" OR "GROUP THEORY,
SO(4)" OR "FIELD THEORY, SO(4)" OR "GAUGE FIELD
THEORY, SO(4)")
*SODING (MODEL, SODING)
SODIUM
-SOFT PHOTON (RADIATIVE CORRECTION)
-SOFT PICNS ("CURRENT ALGEBRA, EFFECTIVE
LAGRANGIANS" OR "MODEL, PCAC")
-SOFT SCATTERING (MOMENTUM TRANSFER, LOW)
*SOLENOID (MAGNET, SOLENOID)
SOLID-STATE COUNTER (SEE ALSO "SUPERCONDUCTOR
DETECTOR")
SOLIDS
*SOLUTION ("FIELD EQUATIONS, SOLUTION"; IF
POSSIBLE USE MORE SPECIFIC TERM)
*SOLITON (FIELD EQUATIONS, SOLITON)
-SOMMERFELD-WATSON TRANSFORMATION (REGGE POLES)
-SONIC SPARK CHAMBER (SPARK CHAMBER, ACOUSTIC)
-SOURCE (SEE "FIELD THEORY" OR "PARTICLE SOURCE")
-SOURCE ALGEBRA (CURRENT ALGEBRA)
*SPACE
*SPACE CHARGE (FOR ACCELERATORS ONLY)
*SPACE RAD LAB LINAC
*SPACE-TIME (FIELD THEORY, SPACE-TIME)
-SPALLATION (SEE "FISSION")
SPARK CHAMBER
*SPATIAL DISTRIBUTION (ONLY USED FOR COSMIC
RADIATION; SEE ALSO "ANGULAR DISTRIBUTION")
*SPATIAL RESOLUTION (COUNTERS AND DETECTORS,
SPATIAL RESOLUTION)
-SPEAR (FOR ACCELERATOR ASPECTS, "ELECTRON
POSITRON, STORAGE RING", FOR EXPERIMENTAL
RESULTS, "SLAC SPEAR STAR")
*SPECIAL FOCUSING (MAGNET, SPECIAL FOCUSING)
*SPECTATOR ("MODEL, SPECTATOR", POSSIBLY ALSO
"MODEL, DEUTERON")
SPECTRA
-SPECTRAL FUNCTION (SEE "SPECTRAL
REPRESENTATION" OR "MANDELSTAM REPRESENTATION")
SPECTRAL REPRESENTATION
SPECTROMETER ((RESTRICTED USE). SEE "MAGNETIC
SPECTROMETER". SEE ALSO "FADRON SPECTROSCOPY")
-SPECTROSCOPY (SEE "SPECTROMETER" OR "MAGNETIC
SPECTROMETER". SEE ALSO "FADRON SPECTROSCOPY")
*SPHERICITY (JET, SPHERICITY)
SPIN
-SPIN FLIP (SEE "AMPLITUDE ANALYSIS")
-SPIN NONFLIP (SEE "AMPLITUDE ANALYSIS")
-SPIN-PARTY ANALYSIS (PARTIAL WAVE ANALYSIS)
*SPINLESS ((RESTRICTED USE), NOT USED FOR BOSONS)
SPINOR
-SPINOR FIELD THEORY (FIELD THEORY, SPINOR)
*SPLIT-FIELD (AT CERN ISR: "MAGNETIC DETECTOR,
SPLIT-FIELD")
-SPLITTING (SEE "MASS DIFFERENCE")
*SPONTANEOUSLY ERKEN (SYMMETRY, SPONTANEOUSLY
BREAKEN)
-SPURION (SEE "SYMMETRY, U(1)")
-SQUARE-WELL POTENTIAL (POTENTIAL SCATTERING)
*STACK ("COUNTERS AND DETECTORS, STACK" OR
"NUCLEAR EMULSION, STACK")
*STACKING ("INJECTION, STACKING" AND "STORAGE
RING")
*STANFORD LINAC MK3 (ONLY FOR EXPERIMENTAL
RESULTS GAINED THERE)
-STATIC MODEL (SEE "MODEL, CHEW-LOW")
-STATIONARY PHASE (SEE "MATHEMATICAL METHODS,
PATH INTEGRAL")
*STATISTICAL (MODEL, STATISTICAL)
STATISTICAL ANALYSIS (RESTRICTED TO BASIC PAPERS)
-STATISTICAL BOOTSTRAP (BOOTSTRAP, STATISTICAL)
STATISTICAL MECHANICS
-STATISTICAL TENSOR (SPIN, DENSITY MATRIX)
STATISTICS
-STATUS REPORT (ACTIVITY REPORT)
-STEEL (USE "IRON")
*STICHEL THEOREM (SELECTION RULE, STICHEL THEOREM)
*STICHEL-SCHOLZ (MODEL, STICHEL-SCHOLZ)
-STIMULATED EMISSION (SEE "OPTICS, LASER" OR
"RADIATIVE DECAY" OR "ATOMIC PHYSICS")
-STOCHASTIC MODEL (MODEL, STATISTICAL)
*STOOLSKY-SAKURAI (MODEL, STOOLSKY-SAKURAI)
STORAGE RING (FOR ACCELERATOR ASPECTS ONLY;
FOR EXPERIMENTAL RESULTS USE "COLLIDING BEAMS")
STRANGE PARTICLE
STRANGENESS
*STRANGENESS CHANGING (SEE "CURRENT,
STRANGENESS CHANGING")
-STRATON (QUARK)
STREAMER CHAMBER
*STRING (MODEL, STRING)
*STRIP (APPROXIMATION, STRIP)
-STRONG ABSORPTION (MODEL, ABSORPTION)
*STRONG COUPLING (MODEL, STRONG COUPLING)
STRONG INTERACTION (ALSO "MODEL, STRONG
INTERACTION")
STRONTIUM
*STRUCTURE FUNCTION (USE ONLY SINGLY. OCCURS
WITH "INCLUSIVE REACTION" OR "DEEP INELASTIC
SCATTERING". DO NOT USE "ANALYTIC PROPERTIES")
*SU(N) ("SYMMETRY, SU(N)" OR "GROUP THEORY,
SU(N)" OR "FIELD THEORY, SU(N)" OR "GAUGE FIELD
THEORY, SU(N)")
*SU(N) X SU(N) ("SYMMETRY, SU(N) X SU(N)" OR
"GROUP THEORY, SU(N) X SU(N)" OR "FIELD THEORY,
SU(N) X SU(N)" OR "GAUGE FIELD THEORY, SU(N) X
SU(N)")
*SU(1,1) ("SYMMETRY, SU(1,1)" OR "GROUP THEORY,
SU(1,1)" OR "FIELD THEORY, SU(1,1)" OR "GAUGE
FIELD THEORY, SU(1,1)")
*SU(2) ("SYMMETRY, SU(2)" OR "GROUP THEORY,
SU(2)" OR "FIELD THEORY, SU(2)" OR "GAUGE FIELD
THEORY, SU(2)")
*SU(2) X SU(2) ("SYMMETRY, SU(2) X SU(2)" OR
"GROUP THEORY, SU(2) X SU(2)" OR "FIELD THEORY,
SU(2) X SU(2)" OR "GAUGE FIELD THEORY, SU(2) X
SU(2)")
*SU(2) X SU(2) X U(1) ("SYMMETRY, SU(2) X SU(2)
X U(1)" OR "GROUP THEORY, SU(2) X SU(2) X U(1)"
OR "FIELD THEORY, SU(2) X SU(2) X U(1)" OR "GAUGE
FIELD THEORY, SU(2) X SU(2) X U(1)")
*SU(2) X U(1) ("SYMMETRY, SU(2) X U(1)" OR
"GROUP THEORY, SU(2) X U(1)" OR "FIELD THEORY,
SU(2) X U(1)" OR "GAUGE FIELD THEORY, SU(2) X
U(1)")
*SU(2) X U(1) X SU(3) ("SYMMETRY, SU(2) X U(1)
X SU(3)" OR "GROUP THEORY, SU(2) X U(1) X SU(3)"
OR "FIELD THEORY, SU(2) X U(1) X SU(3)" OR "GAUGE
FIELD THEORY, SU(2) X U(1) X SU(3)")
*SU(2) X U(1) X U(1) ("SYMMETRY, SU(2) X U(1) X
U(1)" OR "GROUP THEORY, SU(2) X U(1) X U(1)"
OR "FIELD THEORY, SU(2) X U(1) X U(1)" OR "GAUGE
FIELD THEORY, SU(2) X U(1) X U(1)")
*SU(2)W ("SYMMETRY, SU(2)W" OR "GROUP THEORY,
SU(2)W" OR "FIELD THEORY, SU(2)W" OR "GAUGE FIELD
THEORY, SU(2)W")
*SU(2,2) ("SYMMETRY, SU(2,2)" OR "GROUP THEORY,
SU(2,2)" OR "FIELD THEORY, SU(2,2)" OR "GAUGE
FIELD THEORY, SU(2,2)")
*SU(3) ("SYMMETRY, SU(3)" OR "GROUP THEORY,
SU(3)" OR "FIELD THEORY, SU(3)" OR "GAUGE FIELD
THEORY, SU(3)")
*SU(3) X SU(3) ("SYMMETRY, SU(3) X SU(3)" OR
"GROUP THEORY, SU(3) X SU(3)" OR "FIELD THEORY,
SU(3) X SU(3)" OR "GAUGE FIELD THEORY, SU(3) X
SU(3)")
*SU(3) X SU(3) ("SYMMETRY, SU(3) X SU(3)"
OR "GROUP THEORY, SU(3) X SU(3)" OR "FIELD THEORY,
SU(3) X SU(3)" OR "GAUGE FIELD THEORY, SU(3) X
SU(3)")
*SU(3) X U(1) ("SYMMETRY, SU(3) X U(1)" OR
"GROUP THEORY, SU(3) X U(1)" OR "FIELD THEORY,
SU(3) X U(1)" OR "GAUGE FIELD THEORY, SU(3) X
U(1)")
*SU(3) ("SYMMETRY, SU(3)" OR "GROUP THEORY,
SU(3)" OR "FIELD THEORY, SU(3)" OR "GAUGE FIELD
THEORY, SU(3)")
*SU(3) X SU(3) ("SYMMETRY, SU(3) X SU(3)"
OR "GROUP THEORY, SU(3) X SU(3)" OR "FIELD THEORY,
SU(3) X SU(3)" OR "GAUGE FIELD THEORY, SU(3) X
SU(3)")
*SU(3) X U(1) ("SYMMETRY, SU(3) X U(1)" OR
"GROUP THEORY, SU(3) X U(1)" OR "FIELD THEORY,
SU(3) X U(1)" OR "GAUGE FIELD THEORY, SU(3) X
U(1)")
*SU(4) ("SYMMETRY, SU(4)" OR "GROUP THEORY,
SU(4)" OR "FIELD THEORY, SU(4)" OR "GAUGE FIELD
THEORY, SU(4)")
*SU(4) X SU(4) ("SYMMETRY, SU(4) X SU(4)" OR
"GROUP THEORY, SU(4) X SU(4)" OR "FIELD THEORY,
SU(4) X SU(4)" OR "GAUGE FIELD THEORY, SU(4) X
SU(4)")
*SU(6) ("SYMMETRY, SU(6)" OR "GROUP THEORY,
SU(6)" OR "FIELD THEORY, SU(6)" OR "GAUGE FIELD
THEORY, SU(6)")
*SU(6) X O(3) ("SYMMETRY, SU(6) X O(3)" OR
"GROUP THEORY, SU(6) X O(3)" OR "FIELD THEORY,
SU(6) X O(3)" OR "GAUGE FIELD THEORY, SU(6) X
O(3)")
*SU(6)W ("SYMMETRY, SU(6)W" OR "GROUP THEORY,
SU(6)W" OR "FIELD THEORY, SU(6)W" OR "GAUGE FIELD
THEORY, SU(6)W")

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*SU(8) (*SYMMETRY, SU(8)* OF *GROUP THEORY,
SU(8)* OR *FIELD THEORY, SU(8)* OR *GAUGE FIELD
THEORY, SU(8)*)
*SUGAWARA (MODEL, SUGAWARA)
SULFUR
SUM RULE
SUPERCONDUCTING (FOR APPARATUS; ALSO USED
THEORETICALLY; *MODEL, SUPERCONDUCTING*)
-SUPERCONDUCTIVITY (SEE *SUPERCONDUCTING*)
*SUPERCONVERGENCE (SUM RULE, SUPERCONVERGENCE)
-SUPERFIELD (FIELD THEORY, SUPERSYMMETRY)
-SUPERAUCTION (GAUGE FIELD THEORY, SUPERSYMMETRY)
-SUPERGRAVITY (GRAVITATION, SUPERSYMMETRY)
-SUPERMULTIFLET (SEE *MULTIFLET*)
-SUPERPOSITION (*INTERFERENCE* (RESTRICTED USE))
*SUPERPROPAGATOR (PROPAGATOR, SUPERPROPAGATOR)
*SUPERRENORMALIZABLE (FIELD THEORETICAL MODEL,
SUPERRENORMALIZABLE)

*SUPERSELECTION RULE (SUM RULE, SUPERSELECTION
RULE)
*SUPERSYMMETRY (FIELD THEORY, SUPERSYMMETRY)
*SUPERWEAK INTERACTION (WEAK INTERACTION,
SUPERWEAK INTERACTION)
-SUSCEPTIBILITY (SEE *MAGNET*)
SYMMETRY
SYMMETRY BREAKING
-SYMPLECTIC GROUPS (SEE *GROUP THEORY*)
SYNCHRO-CYCLOTRON
-SYNCHROPHASOTRON (SYNCHROTRON OR PROTON
SYNCHROTRON OR ELECTRON SYNCHROTRON)
SYNCHROTRON
SYNCHROTRON OSCILLATION
SYNCHROTRON RADIATION

T
-T-INVARIANCE (INVARIANCE, TIME REVERSAL)
-T-MATRIX (S-MATRIX)
*TABLES
*TACHYON (POSTULATED PARTICLE, TACHYON)
*TADPOLE (FEYNMAN GRAPH, TADPOLE)
*TAGGED BEAM ('PHOTON, TAGGED BEAM' OR
 'ELECTRON...') TAGGED BEAM")
-TALK (NOT USED AS A KEYWORD. FOR CONFERENCE
 LECTURES AND REVIEWS, KEYWORDS 'LECTURES' OR
 'REVIEW' WILL BE USED. OTHER CONFERENCE TALKS
 SHOW ENTRY (TALK) BEHIND TITLE.)
TAUTALUM
TARGET
-TARGET POLARIZATION (USE 'TARGET,
 POLARIZATION' FOR MEASUREMENT OF POLARIZATION
 DEGREE. SEE ALSO 'POLARIZED TARGET')
*TASSO (AT PETRA: 'MAGNETIC DETECTOR, TASSO')
TAU
-TCP (SEE 'CPT')
-TDC (FAST LOGIC, TIME-OF-FLIGHT)
TECHNETIUM
-TECHNOLOGY (SEE FOR MORE SPECIFIC TERMS)
-TELESCOPE (SEE MORE SPECIFIC KEYWORD)
TELLURIUM
TEMPERATURE
*TENSOR (RESTRICTED USE)
TENSOR MESON
-TENSOR MESON DOMINANCE (MODEL, MESON DOMINANCE)
TERBIRUM
THALLIUM
THEORY OF ELEMENTARY PARTICLES
-THERMAL SHIELDING (VACUUM SYSTEM)
*THERMODYNAMICAL (MODEL, THERMODYNAMICAL)
 THERMODYNAMICS
*THERMOLUMINESCENCE (COUNTERS AND DETECTORS,
 THERMLUMINESCENCE)
THESIS (INCLUDING SOME MASTERS' THESES)
*THIRRING (FIELD THEORETICAL MODEL, THIRRING)
THORIUM
-THREE-BODY ANNIHILATION (MULTIPLE PRODUCTION,
 ANNIHILATION)
THREE-BODY PROBLEM
*THREE-DIMENSIONAL (SEE 'FIELD THEORY,
 THREE-DIMENSIONAL' OR 'QUANTUM ELECTRODYNAMICS,
 THREE-DIMENSIONAL' OR 'QUANTUM CHROMODYNAMICS,
 THREE-DIMENSIONAL' OR 'QUANTUM FLAVORDYNAMICS,
 THREE-DIMENSIONAL')
-THREE-MESON (SEE 'EXCHANGE, MULTIMESON')
-THREE-PHOTON (SEE 'EXCHANGE, MULTIPHOTON')
-THREE-PION (SEE 'EXCHANGE, MULTIPION')
-THREE-POINT FUNCTION (VERTEX FUNCTION)
THRESHOLD
*THRUST (JET, THRUST)
THULIUM
-TIME DISTRIBUTION (SEE 'TIME VARIATION'; ONLY
 USED FOR COSMIC RADIATION OR FUNDAMENTAL
 CONSTANTS)
*TIME MEASUREMENT (SEE ALSO 'FAST LOGIC,
 TIME-OF-FLIGHT' OR 'FAST LOGIC, COINCIDENCE')
*TIME RESOLUTION (COUNTERS AND DETECTORS, TIME
 RESOLUTION)
*TIME REVERSAL ('INVARIANCE, TIME REVERSAL' OR
 'VIOLATION, TIME REVERSAL')
*TIME VARIATION (ONLY USED FOR COSMIC RADIATION
 OR FUNDAMENTAL CONSTANTS)
*TIME-OF-FLIGHT (FAST LOGIC, TIME-OF-FLIGHT)
-TIME-TO-DIGITAL CONVERTER (FAST LOGIC,
 TIME-OF-FLIGHT)
TIN
TITANIUM
*TOKYO ES
-TOLLER POLE MODEL ('PARTIAL WAVE' AND
 'ANALYTIC PROPERTIES')
*TONSK ES
-TOP (QUARK, TRUTH)
*TOPOLOGICAL (CHARGE, TOPOLOGICAL)
-TOPOLOGICAL CROSS SECTION (CHANNEL CROSS SECTION)
*TOPOLOGICAL EXPANSION (DUALITY, TOPOLOGICAL
 EXPANSION)
TOTAL CROSS SECTION (SEE ALSO 'CHANNEL CROSS
 SECTION')
TOTAL-ABSORPTION COUNTER
-TOUSCHEK EFFECT (BEAM INSTABILITY)
*TPC (AT PEP: 'MAGNETIC DETECTOR, TPC'. FOR
 TIME-TO-PULSE-HEIGHT CONVERTERS USE 'FAST LOGIC')
TRACK DATA ANALYSIS
-TRACK FOLLOWING (USE 'TRACK DATA ANALYSIS,
 ON-LINE' OR 'TRACK DATA ANALYSIS, OFF-LINE')
-TRACK MEASURING (USE 'TRACK DATA ANALYSIS,
 ON-LINE' OR 'TRACK DATA ANALYSIS, OFF-LINE')
TRACK PHOTOGRAPHY
*TRACK SENSITIVE (ONLY USED FOR TRACKS
 VISUALIZED IN MATER. LIKE 'PLASTICS, TRACK
 SENSITIVE' OR 'GLASS, TRACK SENSITIVE')
TRACKS
-TRAJECTORY (SEE 'REGGE POLES' OR 'REGGE CUT'.
 NOT USED FOR PARTICLE TRAJECTORY)
TRANSFORMATION (NOT USED IN CONNECTION WITH
 'RENORMALIZATION GROUP')
*TRANSITION
*TRANSITION RADIATION (SEE 'COUNTERS AND
 DETECTORS, TRANSITION RADIATION'. NOT USED FOR
 RADIATIVE DECAY)
-TRANSITION RADIATION COUNTER (USE 'COUNTERS
 AND DETECTORS, TRANSITION RADIATION')
-TRANSMISSION (USE 'ABSORPTION')
*TRANSURANIUM (ELEMENTS, TRANSURANIUM)
*TRANSVERSE (RESTRICTED USE. SEE ALSO
 'TRANSVERSE MOMENTUM')
-TRANSVERSE BEAM OSCILLATION (BETATRON OSCILLATION)
TRANSVERSE MOMENTUM
*TREE (APPROXIMATION, TREE)
-TRIMAN-YANG TEST (DECAY, ANGULAR DISTRIBUTION)
-TRIANGLE ANOMALY
-TRIANGLE GRAPH (FEYNMAN GRAPH)
-TRIGGERING (FAST LOGIC, COINCIDENCE)
*TRIMUON (FINAL STATE, TRIMUON)
-TRIPLE-POMERON COUPLING (POMERON, COUPLING)
*TRIPLE-REGGE LIMIT (INCLUSIVE REACTION,
 TRIPLE-REGGE LIMIT)
*TRIPLET (QUARK, TRIPLET)
TRITIUM
*TRIUM CYCL (AT VANCOUVER)
-TRUSS GRAPH (APPROXIMATION, LADDER)
*TRUTH (QUARK, TRUTH)
-TUNE SHIFT (SEE 'RF SYSTEM' OR 'BEAM OPTICS')
TUNGSTEN
-TWO-BODY (USE ONLY AS 'EXCHANGE, TWO-PARTICLE')
-TWO-COMPONENT (POSSIBLY 'DIFFRACTION,
 DISSOCIATION' AND 'MODEL, MULTIPERIPHERAL')
*TWO-COMPONENT NEUTRINO (MODEL, TWO-COMPONENT
 NEUTRINO)
*TWO-DIMENSIONAL (SEE 'FIELD THEORY,
 TWO-DIMENSIONAL' OR 'QUANTUM ELECTRODYNAMICS,
 TWO-DIMENSIONAL' OR 'QUANTUM CHROMODYNAMICS,
 TWO-DIMENSIONAL' OR 'QUANTUM FLAVORDYNAMICS,
 TWO-DIMENSIONAL')
*TWO-GAMMA (AT PEP: 'MAGNETIC DETECTOR, TWO-GAMMA')
*TWO-PARTICLE (EXCHANGE, TWO-PARTICLE)
*TWO-PHOTON (EXCHANGE, TWO-PHOTON)
*TWO-PION (EXCHANGE, TWO-PION)

*U(N) (*SYMMETRY, U(N)* OR *GROUP THEORY, U(N)*
OR *FIELD THEORY, U(N)* OR *GAUGE FIELD THEORY,
U(N)*)
*U(1) (*SYMMETRY, U(1)* OR *GROUP THEORY, U(1)*
OR *FIELD THEORY, U(1)* OR *GAUGE FIELD THEORY,
U(1)*)
*U(12) (*SYMMETRY, U(12)* OR *GROUP THEORY,
U(12)* OR *FIELD THEORY, L(12)* OR *GAUGE FIELD
THEORY, U(12)*)
*U(2375) (POSTULATED PARTICLE, U(2375))
*U(3) (*SYMMETRY, U(3)* OR *GROUP THEORY, U(3)*
OR *FIELD THEORY, U(3)* OR *GAUGE FIELD THEORY,
U(3)*)
*U(3) X U(3) (*SYMMETRY, U(3) X U(3)* OR *GROUP
THEORY, U(3) X U(3)* OR *FIELD THEORY, U(3) X
U(3)* OR *GAUGE FIELD THEORY, U(3) X U(3)*)
*U(4) (*SYMMETRY, U(4)* OR *GROUP THEORY, U(4)*
OR *FIELD THEORY, U(4)* OR *GAUGE FIELD THEORY,
U(4)*)
*U(4) X U(4) (*SYMMETRY, U(4) X U(4)* OR *GROUP
THEORY, U(4) X U(4)* OR *FIELD THEORY, U(4) X
U(4)* OR *GAUGE FIELD THEORY, U(4) X U(4)*)
*U(6) (*SYMMETRY, U(6)* OR *GROUP THEORY, U(6)*
OR *FIELD THEORY, U(6)* OR *GAUGE FIELD THEORY,
U(6)*)
*U(6,6) (*SYMMETRY, U(6,6)* OR *GROUP THEORY,
U(6,6)* OR *FIELD THEORY, U(6,6)* OR *GAUGE FIELD
THEORY, U(6,6)*)

*U-SPIN (QUANTUM NUMBER, U-SPIN)
-UIR (GROUP THEORY)
-ULTRAVIOLET DIVERGENCE (RENORMALIZATION)
-UNIFIED FERMION (MODEL, FERMION)
UNIFIED FIELD THEORY (KINDS OF INTERACTION
WHICH ARE UNIFIED ARE ADDED)
UNITARITY (RESTRICTED USE)
-UNITARY IRREDUCIBLE REPRESENTATION (GROUP THEORY)
-UNIVERSAL FERMI INTERACTION (MODEL, WEAK
INTERACTION)
*UNIVERSALITY (*ELECTRON MUON, UNIVERSALITY* OR
WEAK INTERACTION, UNIVERSALITY OR *STRONG
INTERACTION, UNIVERSALITY* OR *ELECTROMAGNETIC
INTERACTION, UNIVERSALITY*)
*UP (QUARK, UP)
UPSILON MESONS
UPSILON(10000)
UPSILON(10400)
UPSILON(9500)
*UR-CITON (MODEL, UR-CITON)
URANIUM
*URRANA BETATRON
*URRARYON (MODEL, URRARYON)

V
-V-A THEORY (MODEL, WEAK INTERACTION)
*V-SPIN (QUANTUM NUMBER, V-SPIN)
-VACUUM CHAMBER (SEE "VACUUM SYSTEM")
-VACUUM EXCHANGE (EXCHANGE, VACUUM QUANTUM NUMBER)
*VACUUM POLARIZATION (FIELD THEORY, VACUUM
Polarization)
*VACUUM QUANTUM NUMBER (EXCHANGE, VACUUM
QUANTUM NUMBER)
*VACUUM STATE (FIELD THEORY, VACUUM STATE)
VACUUM SYSTEM
-VACUUM TECHNIQUES (USE "VACUUM SYSTEM")
*VALENCE (MODEL, VALENCE)
*VALIDITY TEST (RESTRICTED USE FOR GENERAL
TESTS BUT NOT FOR INTERPRETATIONS. EXAMPLE:
"QUANTUM ELECTRODYNAMICS, VALIDITY TEST")
*VAN HOVE (MODEL, VAN HOVE)
-VAN HOVE PLOT (USE "MULTIDIMENSIONAL ANALYSIS,
LONGITUDINAL PHASE SPACE")
VANADIUM
*VARIABLE MASS (MODEL, VARIABLE MASS)
-VARIABLE-ENERGY CYCLOTRON (CYCLOTRON)
*VECTOR ("CURRENT, VECTOR" (RESTRICTED USE))
-VECTOR FOSON (SEE "INTERMEDIATE BOSON" OR
"VECTOR MESON")
-VECTOR CURRENT (SEE "CURRENT, VECTOR" OR
"CONSERVED VECTOR CURRENT" OR "CONSERVED A-V
CURRENT" OR "PCAC" OR "PCVC")

*VECTOR DOMINANCE (MODEL, VECTOR DOMINANCE)
VECTOR MESON
VECTOR MESON BARYON RESONANCE
VECTOR MESON DEUTERON
-VECTOR MESON EXCHANGE (EXCHANGE, VECTOR MESON)
VECTOR MESON INTERMEDIATE BOSON
VECTOR MESON LIGHT NUCLEUS
VECTOR MESON NUCLEON
VECTOR MESON NUCLEUS
VECTOR MESON QUARK
VECTOR MESON VECTOR MESON
-VECTOR-AXIAL-VECTOR THEORY (WEAK INTERACTION)
-VELOCITY SPECTROMETER (FAST LOGIC, TIME-OF-FLIGHT)
*VENEZIANO (MODEL, VENEZIANO)
VERTEX FUNCTION
-VERTEX SPECTROMETER (SEE "HYBRID SYSTEM")
VIOLATION
*VIRASORO (MODEL, VIRASORO)
-VIRASORO ALGEBRA (ALGEBRA, VIRASORO)
-VIRTUAL (NOT USED)
-VIRTUAL PHOTOPRODUCTION (USE
"ELECTROPRODUCTION"; FOR Q-SQUARED --> 0 ADD
"PHOTOPRODUCTION")
*VON NEUMANN (ALGEBRA, VON NEUMANN)
*VORTEX (SEE "FIELD THEORY, VORTEX")

*WW+ (ALGEBRA, W+)
*WW- (POSTULATED PARTICLE, W-)
-WALECKA MODEL (NUCLEAR PROPERTIES)
*WANG (MODEL, WANG)
*WARD IDENTITY (*FIELD THEORY, WARD IDENTITY);
SEE ALSO "WARD-TAKAHASHI IDENTITY")
*WARD-TAKAHASHI IDENTITY (QUANTUM
ELECTRODYNAMICS, WARD-TAKAHASHI IDENTITY)
-WATER
-WATSON-SCHMIDEL TRANSFORMATION (REGGE POLES)
-WAVE EQUATION (QUANTUM MECHANICS)
-WAVE FUNCTION (QUANTUM MECHANICS)
-WAVE PACKET (QUANTUM MECHANICS)
-WAVEGUIDE (SEE "RF SYSTEM" OR "LINEAR
ACCELERATOR" OR "MICROWAVES")
-WEAK ABSORPTION (MODEL, ABSORPTION)
-WEAK COUPLING (PERTURBATION THEORY)
*WEAK CURRENT
WEAK INTERACTION (ALSO "WEAK, WEAK INTERACTION")
*WEINBERG (FIELD THEORETICAL MODEL, WEINBERG)
*WEINBERG ANGLE (WEAK INTERACTION, WEINBERG ANGLE)
-WEIZSAECKER-WILLIAMS (APPROXIMATION,
EQUIVALENT PHOTON)

-WEISS-ZUMINO (FIELD THEORY, SUPERSYMMETRY)
*WEYL (ALGEBRA, WEYL)
*WICK-CUTKOSKY (MODEL, WICK-CUTKOSKY)
*WIDE-ANGLE (*SPECTROMETER, WIDE-ANGLE" OR,
E.G., "ELASTIC SCATTERING, WIDE-ANGLE")
*WIDE-GAP (SPARK CHAMBER, WIDE-GAP)
*WIDTH (USAGE IN ACCORDANCE WITH ROSENFIELD
TABLES; SEE ALSO "DECAY WIDTH")
*WIGGLER (MAGNET, WIGGLER)
-WIGHTMAN FIELDS (AXIOMATIC FIELD THEORY)
-WIGHTMAN FUNCTION (AXIOMATIC FIELD THEORY)
*WIGNER-WEISSkopf (MODEL, WIGNER-WEISSKOPF)
-WILLIAMS-WEIZSAECKER (APPROXIMATION,
EQUIVALENT PHOTON)
-WILSON EXPANSION (FIELD THEORY, SHORT-DISTANCE
BEHAVIOR)
*WIRE (SPARK CHAMBER, WIRE)
*WKB (APPROXIMATION, WKB)
-WOLF METHOD (CORRECTION, OFF-SHELL)
-WOODS-SAXON (*POTENTIAL" OR "POTENTIAL
SCATTERING")
*WU-YANG (MODEL, WU-YANG)

W

X
X(2830)
-X(4100) STRUCTURE (PSI(410C) STRUCTURE)
*X-DEPENDENCE
XENON
XI
XI BARYON RESONANCE
XI DEUTERON
XI INTERMEDIATE BOSON
XI LIGHT NUCLEUS
XI NUCLEUS
XI QUARK
XI VECTOR MESON
XI XI
XI(1530)
XI(1620)
XI(1940)
XI-

XI- ANTI-XI-
XI- BARYON RESONANCE
XI- DEUTERON
XI- INTERMEDIATE BOSON
XI- LIGHT NUCLEUS
XI- NUCLEUS
XI- QUARK
XI- XI-
XIO
XIO BARYON RESONANCE
XIO DEUTERON
XIO INTERMEDIATE BOSON
XIO LIGHT NUCLEUS
XIO NUCLEUS
XIO QUARK
XIO XI-
-XO MESON RESONANCE (ETA(958))

Y (BARYON RESONANCE, HYPERON)

*Y-DEPENDENCE

*YANG (MODEL, YANG)

-YANG-FELDMAN EQUATIONS (FIELD THEORY)

*YANG-MILLS (GAUGE FIELD THEORY, YANG-MILLS)

*YIELD (IN COMBINATION WITH PARTICLES, ONLY
WHERE YIELD IS GIVEN WITHOUT CROSS SECTIONS)

YTTERBIUM

YTTRIUM

*YUKAWA (POTENTIAL, YUKAWA)

Y

Z
Z (BARYON, Z*)
-ZACHARIASEN MODEL (FIELD THEORETICAL MODEL)
-ZGS ACCELERATOR ('PROTON SYNCHROTRON', FOR
EXPERIMENTAL RESULTS USE 'ARGONNE PS')
-ZIMMERMANN MODEL (FIELD THEORETICAL MODEL)

ZINC
ZIRCONIUM
-ZWEIG RULE (SELECTION RULE, IIZUKA-OKUBO-ZWEIG)
*Z0 (POSTULATED PARTICLE, Z0)