

Internal Report
DESY L-75/1
February 1975

The DESY Keyword Thesaurus 1975

DESY-Bibliothek

21. APR. 1975

1950
1951
1952

1953

Keywords

This list contains the regular keywords. Headings and underlined terms in parentheses are NOT used as keywords.

PARTICLES

photon

lepton

neutrino
antineutrino
electron
positron
muon
muon+
muon-

meson

pi
pi+
pi-
pi0
K
K+
K-
KO
anti-KO

nucleon

p
anti-p
n
anti-n
antinucleon

hyperon

Lambda
Antilambda
Sigma
Sigma+
Sigma-
Sigma0
Antisigma
Xi
Xi-
Xi0
Antixi
Omega-
antihyperon

meson resonance

eta(549)
epsilon(700)
rho(765)
rho(765)+
rho(765)-
rho(765)0
omega(784)
eta'(958)
delta(970)
S*(1000)
phi(1019)
A1(1070)
B(1235)
F(1260)
D(1285)
A2(1310)
E(1422)
F*(1514)
pi/rho(1540)
rho'(1600)
A3(1640)
omega(1675)
G(1680)
Rho(1710)
S(1930)
U(2375)
K*(892)
Q region
K(1420)
L(1770)
J(3100)
psi(3700)
X(4100)

baryon resonance

nucleon resonance
N'(1470)
N'(1520)
N'(1535)
N(1670)
N(1688)
N'(1700)
N''(1780)
N(1860)

INTERACTIONS

weak interaction

leptonic decay

electromagnetic interaction

annihilation
bremsstrahlung
Compton scattering
electroproduction
hyperfine structure
ionization
ionization loss
multiple
multiple production
multiple scattering
pair
pair production
photoproduction
radiative correction

strong interaction

charge exchange

(other interactions)

absorption
angular correlation
angular distribution
backscatter
capture
channel cross section
coupling
cross section
decay
decay modes
differential
cross section
diffraction
diffusion
elastic scattering
emission
energy dependence
energy loss
energy spectrum
exchange
final state
flux distribution
high energy behavior
inclusive reaction
interaction
interference
kinematics
longitudinal momentum
momentum transfer
multiplicity
production
radiation
recoil
reflection
scattering
secondary radiation
showers
threshold
total cross section
transverse momentum

cross section

absorption
angular correlation
angular distribution
backscatter
capture
channel cross section
coupling
cross section
decay
decay modes
differential
cross section
diffraction
diffusion
elastic scattering
emission
energy dependence
energy loss
energy spectrum
exchange
final state
flux distribution
high energy behavior
inclusive reaction
interaction
interference
kinematics
longitudinal momentum
momentum transfer
multiplicity
production
radiation
recoil
reflection
scattering
secondary radiation
showers
threshold
total cross section
transverse momentum

EXPERIMENTS

track measuring

bubble chamber
bubble chamber
(hydrogen)
bubble chamber
(deuterium)
bubble chamber
(heavy liquid)
cloud chamber
nuclear emulsion
proportional chamber
spark chamber
streamer chamber
hybrid system
track photography
tracks

counters and detectors

Cherenkov counter

four-pi detector
Geiger-Mueller counter
ionization chamber
proportional counter
scintillation counter
solid-state counter
total-absorption counter

electronics

analog circuit
digital logic
fast logic
pulse-height analyzer
CAMAC system
readout

spectrometer

magnetic spectrometer

beam transport
beam optics
bending magnet
quadrupole lens
pulsed magnet
particle separator
beam hardener
target

accelerator

cyclotron
synchro-cyclotron
betatron
synchrotron
proton synchrotron
electron synchrotron
linear accelerator
storage ring
colliding beams
bunching
beam emittance
beam monitoring
RF system
injection
beam oscillation
betatron oscillation
synchrotron oscillation
ejection

(other keywords)

alignment
background
beam
calibration
coil
dosimetry
magnet
measurement
monitoring
orbit
particle source
power supply
shielding

THEORY

field theory

axiomatic field theory
perturbation theory
analytic properties
quantum electrodynamics
field equations
Bethe-Salpeter equation
scaling
light cone behavior

theory of elementary particles

dispersion relations
spectral
representation

Mandelstam
representation
symmetry
unitarity
model
final-state
interaction
current algebra
Regge poles
Regge cut
pomeron
duality
Veneziano model
neutral current

(other keywords)

approximation
bootstrap
conservation law
coupling constant
Feynman graph
form factor
invariance
many-body problem
three-body problem
multiplet
partial wave
partial-wave analysis
potential scattering
propagator
reaction amplitude
renormalization
S-matrix
selection rule
spinor
sum rule
vertex function
violation

NUCLEAR PHYSICS

nuclear physics
charge distribution
fission
fusion
nuclear properties
nuclear model
nuclear radiation
nuclear reaction
photofission
electrofission
radioactivity

GENERAL PHYSICS

aberration
atomic physics
charge
correction
correlation
cosmic radiation
current
density
dependence
effect
electric field
electricity
electromagnetic
flux
fundamental constant
forces
gravitation
health physics
magnetic field
mass
mechanics
moment
momentum
nonrelativistic
optics
plasma
potential
quantum mechanics
relativistic
relativity theory
resonance
spectra
superconducting
temperature
thermodynamics
transmission

OTHER FIELDS

astrophysics

mathematics

group theory
numerical mathematics
statistics
transformation

computer

programming

chemistry

engineering

mechanical engineering
electrical engineering
power engineering
microwaves
communications
nuclear engineering
heat engineering
low temperature
control system
vacuum techniques
buildings

MATERIALS

(all elements)

alloy
ceramics
chemicals
compounds
concrete
crystal
deuterium
elements
gas
glass
inorganic compounds
liquid
matter
metal
mineral
organic compounds
plastics
rubber
semiconductor
solids
steel
tritium
water

MODAL KEYWORDS

numerical calculations
proposed experiment
tables
review
bibliography
activity report
conference
manual
lectures
book
thesis
data compilation

The DESY Keyword Thesaurus 1975

The terms in this thesaurus are used at DESY for the indexing of papers on high-energy physics and quantum field theory.

1. Purpose of Keyword Assignment

Our keyword assignment serves the following purposes:

- making possible mechanized information retrieval and SDI (Selective Dissemination of Information) service at DESY and other high-energy physics centers,
- establishment of a subject index for the biweekly HIGH ENERGY PHYSICS INDEX.

The total of keywords assigned to a paper will also serve as a substitute for an abstract.

2. Form of Keyword Assignment

Keywords may be used singly or coupled by comma and blank (examples: FIELD THEORY (single) and MODEL, FIELD THEORY (coupled)). While the first term is generally a regular keyword, the second term may be a keyword or a non-keyword.

Non-keyword which are frequently used are standardized and contained in this thesaurus.

The following keywords are frequently used in connection with non-keywords: MODEL, APPROXIMATION, SYMMETRY, EXCHANGE.

3. Two-Particle Combinations (Reactions)

Most of the combinations of any two particles in the following list are single regular keywords. The particle coming first in the list should 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. They also occur on the left-hand side of the reaction equations (see 4).

PHOTON	K	SIGMA
LEPTON	ANTI-KO	ANTISIGMA
FERMION	KO	SIGMA+
NEUTRINO	K+	SIGMAO
ANTINEUTRINO	K-	SIGMA-
ELECTRON	MESON RESONANCE	XI
POSITRON	BARYON	ANTIXI
MUON	ANTIBARYON	XIO
MUON+	NUCLEON	XI-
MUON-	ANTINUCLEON	OMEGA-
HADRON	ANTI-P	VECTOR MESON
MESON	P	BARYON RESONANCE
BOSON	N	DEUTERIUM
PI	ANTI-N	LIGHT NUCLEUS
PIO	HYPERON	NUCLEUS
PI+	ANTIHYPERON	QUARK
PI-	LAMBDA	INTERMEDIATE BOSON
	ANTILAMBDA	

4. Reaction Equations

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

ANTI-P P --> KO K- PI+
PP --> P ANYTHING
DELTA(1236) --> P PI-
ANTI-P P --> DELTA(1236)(P PI-) PI+ PI- (+)

Particles on the left-hand side are arranged in the order of rising masses, particles on the right-hand side are arranged in the order of falling masses.

5. Three-Particle Combinations

Three-particle combinations (non-keywords) succeeding keywords like VERTEX FUNCTION or COUPLING CONSTANT or INTERFERENCE are connected by hyphens and listed in the order of rising masses (Example: COUPLING CONSTANT, PI-RHO(765)-OMEGA(784)).

6. Resonances

Meson and baryon resonances are generally named as in the 1973 Rosenfeld Tables, generally omitting the charge states.

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, and astrophysics.

There are three kinds of entries in this thesaurus:

regular keywords (blank space in Column 1)

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

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/370 sorting sequence:

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

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

A

*ABC (ENHANCEMENT, ABC)
 -ABELIAN FIELD THEORY (USE 'FIELD THEORY')
 ABERRATION
 *ABFST (MODEL, ABFST)
 ABSORPTION
 -ABSORPTIVE MODEL (MODEL, ABSORPTION)
 *ABSORPTIVE PERIPHERAL (MODEL, ABSORPTIVE PERIPHERAL)
 -ABSTRACT ONLY (NOT USED AS A KEYWORD. APPEARS BEHIND THE TITLE)
 ACCELERATOR
 *ACOUSTIC (SPARK CHAMBER, ACCUSTIC)
 ACTINIUM
 -ACTION-AT-A-DISTANCE (AXIOMATIC FIELD THEORY)
 ACTIVITY REPORT
 -ADAIR MODEL (DIFFRACTION')
 -ADC (PULSE-HEIGHT ANALYZER)
 -ADEMOLLO-GATTO THEOREM (SYMMETRY, BROKEN)
 *ADLER (SUM RULE, ADLER)
 -ADLER CONDITION (MODEL, PCAC + CURRENT ALGEBRA)
 *ADLER-DASHEN-GELL-MANN-FUBINI (SUM RULE, ADLER-DASHEN-GELL-MANN-FUBINI)
 -ADLER-WEISBERGER RELATION (MODEL, PCAC + CURRENT ALGEBRA)
 -AGS ACCELERATOR (PROTON SYNCHROTRON)
 *AIR (SHOWERS, AIR)
 ALIGNMENT
 ALLOY
 ALUMINUM
 *AMADO (MODEL, AMADO)
 *AMATI-FUBINI-STANGHELLINI (MODEL, AMATI-FUBINI-STANGHELLINI + MODEL, MULTIPERIPHERAL)
 AMERICIUM
 -AMPLIFIER (ANALOG CIRCUIT)
 -AMPLITUDE ANALYSIS (SEE 'INTERPRETATION OF EXPERIMENTS, CHANNEL CROSS SECTION')
 ANALOG CIRCUIT
 -ANALOG MODEL
 -ANALOG-DIGITAL CONVERTER (PULSE-HEIGHT ANALYZER)
 ANALYTIC PROPERTIES
 -ANALYTICITY (ANALYTIC PROPERTIES)
 ANGULAR CORRELATION
 ANGULAR DISTRIBUTION
 ANGULAR MOMENTUM
 -ANHARMONIC OSCILLATOR (MODEL, OSCILLATOR)
 ANNIHILATION
 -ANTI-K (SEE 'ANTI-KO' OR 'K-')
 ANTI-KO
 ANTI-KO BARYON
 ANTI-KO BARYON RESONANCE
 ANTI-KO DEUTERIUM
 ANTI-KO INTERMEDIATE BOSON
 ANTI-KO K+
 ANTI-KO K-
 ANTI-KO KO
 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 DEUTERIUM
 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 BARYON RESONANCE
 ANTI-P DEUTERIUM
 ANTI-P HYPERON
 ANTI-P INTERMEDIATE BOSON
 ANTI-P LAMBDA
 ANTI-P LIGHT NUCLEUS
 ANTI-P N
 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 DEUTERIUM
 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 (SEE 'ANTINUCLEUS')
 -ANTIFERMION (USE 'FERMION, ANTIPARTICLE')
 ANTIHYPERON
 ANTIHYPERON BARYON RESONANCE
 ANTIHYPERON DEUTERIUM
 ANTIHYPERON INTERMEDIATE BOSON
 ANTIHYPERON LIGHT NUCLEUS
 ANTIHYPERON NUCLEUS
 ANTIHYPERON QUARK
 ANTI LAMBDA
 ANTI LAMBDA BARYON RESONANCE
 ANTI LAMBDA DEUTERIUM
 ANTI LAMBDA INTERMEDIATE BOSON
 ANTI LAMBDA LIGHT NUCLEUS
 ANTI LAMBDA NUCLEUS
 ANTI LAMBDA QUARK
 ANTI LAMBDA VECTOR MESON
 -ANTILEPTON (USE 'LEPTON, ANTIPARTICLE')
 -ANTIMATTER (MATTER, ANTIPARTICLE (RESTRICTED USE))
 ANTIMONY
 ANTINEUTRINO
 ANTINEUTRINO ANTI-KO
 ANTINEUTRINO ANTI-N
 ANTINEUTRINO ANTI-P
 ANTINEUTRINO ANTIBARYON
 ANTINEUTRINO ANTINEUTRINO
 ANTINEUTRINO ANTINUCLEON
 ANTINEUTRINO BARYON
 ANTINEUTRINO BARYON RESONANCE
 ANTINEUTRINO BOSON
 ANTINEUTRINO DEUTERIUM
 ANTINEUTRINO ELECTRON
 ANTINEUTRINO HADRON
 ANTINEUTRINO HYPERON
 ANTINEUTRINO INTERMEDIATE BOSON
 ANTINEUTRINO K
 ANTINEUTRINO K+
 ANTINEUTRINO K-
 ANTINEUTRINO KO
 ANTINEUTRINO LAMBDA
 ANTINEUTRINO LIGHT NUCLEUS
 ANTINEUTRINO MESON
 ANTINEUTRINO MESON RESONANCE
 ANTINEUTRINO MUON
 ANTINEUTRINO MUON+
 ANTINEUTRINO MUCN-
 ANTINEUTRINO N
 ANTINEUTRINO NUCLEON
 ANTINEUTRINO NUCLEUS
 ANTINEUTRINO OMEGA-
 ANTINEUTRINO P
 ANTINEUTRINO PI
 ANTINEUTRINO PI+
 ANTINEUTRINO PI-
 ANTINEUTRINO PIO
 ANTINEUTRINO POSITRON
 ANTINEUTRINO QUARK
 ANTINEUTRINO SIGMA
 ANTINEUTRINO SIGMA+
 ANTINEUTRINO SIGMA-
 ANTINEUTRINO SIGMAO
 ANTINEUTRINO VECTOR MESON

A

ANTINEUTRINO XI
 ANTINEUTRINO XI-
 ANTINEUTRINO XIO
 ANTINUCLEON
 ANTINUCLEON BARYON RESONANCE
 ANTINUCLEON DEUTERIUM
 ANTINUCLEON HYPERCN
 ANTINUCLEON INTERMEDIATE BOSON
 ANTINUCLEON LAMBOA
 ANTINUCLEON LIGHT NUCLEUS
 ANTINUCLEON N
 ANTINUCLEON NUCLEUS
 ANTINUCLEON OMEGA-
 ANTINUCLEON P
 ANTINUCLEON QUARK
 ANTINUCLEON SIGMA
 ANTINUCLEON SIGMA+
 ANTINUCLEON SIGMA-
 ANTINUCLEON SIGMAO
 ANTINUCLEON VECTOR MESON
 ANTINUCLEON XI
 ANTINUCLEON XI-
 ANTINUCLEON XIO
 *ANTINUCLEUS
 ANTIPARTICLE
 -ANTIPARTICLE PARTICLE (USE 'PARTICLE
 ANTIPARTICLE')
 -ANTIQUARK ('QUARK, ANTIPARTICLE'. SEE ALSO
 'QUARK ANTIQUARK')
 ANTISIGMA
 ANTISIGMA BARYON RESONANCE
 ANTISIGMA DEUTERIUM
 ANTISIGMA INTERMEDIATE BOSON
 ANTISIGMA LIGHT NUCLEUS
 ANTISIGMA NUCLEUS
 ANTISIGMA QUARK
 -ANTISIGMAO (SIGMAO, ANTIPARTICLE)
 -ANTISYMMETRY (USE 'POLARIZATION')
 ANTIXI
 ANTIXI BARYON RESONANCE
 ANTIXI DEUTERIUM
 ANTIXI INTERMEDIATE BOSON
 ANTIXI LIGHT NUCLEUS

ANTIXI NUCLEUS
 ANTIXI QUARK
 ANTIXI VECTOR MESON
 *ANYTHING (ONLY IN REACTIONS)
 APPROXIMATION
 -ARGAND DIAGRAM ('PARTIAL-WAVE ANALYSIS' +
 (POSSIBLY) 'MESON RESONANCE' OR 'BARYON
 RESONANCE')
 ARGON
 *ARGONNE PS
 ARSENIC
 *ASSOCIATED ('PRODUCTION, ASSOCIATED' OR
 'DECAY, ASSOCIATED')
 ASTATINE
 ASTROPHYSICS
 -ASYMMETRY (USE 'POLARIZATION')
 -ASYMPTOTIC BEHAVIOR (IN GENERAL 'HIGH ENERGY
 BEHAVIOR', USED ONLY FOR THEORETIC MODELS
 IN THE ASYMPTOTIC RANGE, AND ONLY WHERE
 HIGH ENERGY BEHAVIOR IS NOT IMPLICITLY
 CONTAINED IN OTHER KEYWORDS SUCH AS 'REGGE
 POLES' OR 'FACTORIZATION')
 *ASYMPTOTIC FREEDOM (FIELD THEORY, ASYMPTOTIC
 FREEDOM)
 -AT REST
 ATOM
 *ATOMIC NUMBER
 ATOMIC PHYSICS
 -AUTOMODELITY (SCALING)
 -AUXILIARY CIRCUITS (IF ELECTRONICS, GENERALLY
 'DIGITAL LOGIC'. IF NOT ELECTRONICS, 'ELECTRICAL
 ENGINEERING')
 *AXIAL (RESTRICTED USE)
 -AXIAL VECTOR CURRENT (CURRENT ALGEBRA)
 -AXIAL-VECTOR CURRENT MODEL (CURRENT ALGEBRA)
 *AXIAL-VECTOR MESON DOMINANCE (MODEL, AXIAL-
 VECTOR DOMINANCE)
 AXIOMATIC FIELD THEORY
 A1(1070)
 -A2 EXCHANGE (EXCHANGE, A2(1310))
 -A2 SPLITTING (A2(1310), MASS DIFFERENCE)
 A2(1310)
 A3(1640)

B

B(1235)
BACKGROUND
BACKSCATTER
-BACKWARD SCATTERING (BACKSCATTER)
*BAE (MODEL, BAG)
*BALI-CHEW-PIGNOTTI (MODEL, BALI-CHEW-PIGNOTTI)
*BARDAKCI-RUEGG (MODEL, BARDAKCI-RUEGG)
*BARDAKCI-RUEGG-VIRASORO (MODEL, BARDAKCI-RUEGG-VIRASORO)
BARYON
BARYON (ALSO: MODEL, 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 DEUTERIUM
-BARYON EXCHANGE (EXCHANGE, BARYON)
BARYON HYPERON
BARYON INTERMEDIATE BOSON
BARYON LAMBDA
BARYON LIGHT NUCLEUS
-BARYON MODEL (MODEL, BARYON)
BARYON N
BARYON NUCLEON
BARYON NUCLEUS
-BARYON NUMBER (*QUANTUM NUMBER, BARYON*)
BARYON OMEGA-
BARYON P
-BARYON POLE MODEL (EXCHANGE, BARYON)
BARYON QUARK
BARYON RESONANCE
-BARYON RESONANCE BARYON RESONANCE (*BARYON RESONANCE, BARYON BARYON*)
BARYON RESONANCE DEUTERIUM
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
*BATAVIA PS
BEAM
-BEAM CALIBRATION (BEAM MONITORING)
-BEAM CHOPPER (SEE *BUNCHING*)
-BEAM DUMP (SHIELDING, BEAM STOP)
BEAM EMITTANCE
BEAM HARDENER
BEAM MONITORING
BEAM OPTICS
BEAM OSCILLATION
-BEAM POLARIZATION (*BEAM, POLARIZATION*)
*BEAM STOP (SHIELDING, BEAM STOP)
BEAM TRANSPORT
*BEAM-BEAM (SCATTERING, BEAM-BEAM)
*BELL-STEINBERGER (MODEL, BELL-STEINBERGER)
BENDING MAGNET
*BERKELEY PS
BERKELIUM
-BERMAN-BJORKEN-KOGUT MODEL (TRANSVERSE MOMENTUM, HIGH)
BERYLLIUM
-BETA DECAY (*LEPTONIC DECAY*)
-BETA FUNCTION
BETATRON
BETATRON OSCILLATION
-BETHE-GOLDSTONE
*BETHE-HEITLER (*APPROXIMATION, BETHE-HEITLER*)
BETHE-SALPETER EQUATION
-BHABHA SCATTERING (ELECTRON POSITRON, ELASTIC SCATTERING)
*BIALAS-ZALEWSKI (MODEL, BIALAS-ZALEWSKI)
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-PASCHOS (MODEL, PARTON)
-BLACK HOLE (GRAVITATION)
-BLANKENBECLER-BRODSKY-GUNION (MODEL, CONSTITUENT INTERCHANGE)
*BLOOM-GILMAN (*SUM RULE, BLOOM-GILMAN* OR *DUALITY, BLOOM-GILMAN*)
*BLOWUP (BEAM, BLOWUP)
*BOHN ES
BOOK
-BOOSTER (USE *INJECTION* OR *SYNCHROTRON*)
BOOTSTRAP
*BORN (APPROXIMATION, BORN)
BORON
BOSON (ALSO: *MODEL, 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 DEUTERIUM
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
-BOUND ELECTRONS (ATOMIC PHYSICS)
*BOUND STATE (ONLY USED AS *MODEL, BOUND STATE*)
*BOUNDARY CONDITION (MODEL, BOUNDARY CONDITION)
-BOX DIAGRAM (SEE *FEYNMAN GRAPH* (RESTRICTED USE))
-BRANCHING RATIO (DECAY MODES (RESTRICTED USE))
-BRANS-DICKE (GRAVITATION)
*BREAKUP (*FISSION, BREAKUP* OR, E.G., *P, BREAKUP*)
*BREIT-WIGNER (MODEL, BREIT-WIGNER)
BREMSSTRAHLUNG (ALSO *MODEL, BREMSSTRAHLUNG*)
*BROKEN (*SYMMETRY, BROKEN* EXAMPLE: *SYMMETRY, SU(3)* + *SYMMETRY, BROKEN*)
BROMINE
*BROOKHAVEN PS
BUBBLE CHAMBER
BUBBLE CHAMBER (DEUTERIUM)
BUBBLE CHAMBER (HEAVY LIQUID)
BUBBLE CHAMBER (HYDROGEN)
BUILDINGS
BUNCHING
*BYPASS (STORAGE RING, BYPASS)
-B5 MODEL (VENEZIANO MODEL, N-POINT FUNCTION)

- C -C MESON RESONANCE (Q REGION)
- C* ALGEBRA ('MECHANICS, STATISTICS' OR 'AXIOMATIC FIELD THEORY')
- C-PARITY (QUANTUM NUMBER, CHARGE CONJUGATION)
- *CABIBBO (MODEL, CABIBBO)
- *CABIBBO ANGLE (WEAK INTERACTION, CABIBBO ANGLE)
- *CABIBBO-MORWITZ-NE'EMAN (MODEL, CABIBBO-MORWITZ-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 EQUATIONS (RENORMALIZATION, CALLAN-SYMANZIK EQUATIONS)
- *CALLAN-TREIMAN RELATION (CURRENT ALGEBRA, CALLAN-TREIMAN RELATION)
- CALORIMETER (SEE 'BEAM MONITORING' OR 'TOTAL-ABSORPTION COUNTER')
- CAMAC SYSTEM
- *CAMBRIDGE ES
- *CANESCHI-PIGNOTTI (MODEL, CANESCHI-PIGNOTTI)
- CAPTURE
- CARBON
- *CARLITZ-KISLINGER (MODEL, CARLITZ-KISLINGER)
- *CASCADE ('MODEL, CASCADE' OR 'DECAY, CASCADE'; SEE ALSO 'SHOWERS')
- CASCADE EVAPORATION MODEL (MODEL, CASCADE)
- CASTILLEJO-DALITZ-DYSON POLES (PARTIAL WAVE, DISPERSION RELATIONS)
- *CAUSALITY ('DISPERSION RELATIONS' OR 'AXIOMATIC FIELD THEORY, CAUSALITY')
- CAVITY (SEE 'RF SYSTEM')
- CDD POLES (PARTIAL WAVE, DISPERSION RELATIONS)
- *CENTRAL REGION (USE 'INCLUSIVE REACTION, CENTRAL REGION')
- CERAMICS
- CERIUM
- *CERN CYCL (AT GENEVA)
- *CERN STOR (AT GENEVA)
- *CERN1 PS (AT GENEVA)
- *CERN2 PS (AT GENEVA)
- CESIUM
- CGL (DISPERSION RELATIONS, CHEW-GOLDBERGER-LCW)
- CGLN (DISPERSION RELATIONS, CHEW-GOLDBERGER-LOW-NAMBU)
- *CHAN-LOSKIEWICZ-ALLISON (MODEL, CHAN-LOSKIEWICZ-ALLISON)
- CHANNEL (NOT TRANSLATED)
- 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 (ONLY FOR NUCLEI, FOR PARTICLES SEE 'FORM FACTOR')
- CHARGE EXCHANGE
- CHARGE STATISTICS (CHARGE, STATISTICS)
- CHARGED PARTICLE
- *CHARGED SCALAR (EXCHANGE, CHARGED SCALAR)
- CHARGED SCALAR STATIC MODEL ('MODEL, STATIC' AND 'EXCHANGE, CHARGED SCALAR')
- *CHARM (QUARK, CHARM)
- CHARMED PARTICLE
- CHARPAK CHAMBER (PROPORTIONAL CHAMBER)
- CHEMICALS
- CHEMISTRY
- CHENG-DASHEN (SYMMETRY, CHIRAL)
- *CHENG-WU (MODEL, CHENG-WU)
- *CHERENKOV (RADIATION, CHERENKOV)
- CHERENKOV COUNTER
- CHERENKOV RADIATION (RADIATION, CHERENKOV)
- CHEW-FRAUTSCHI PLCT ('REGGE POLES')
- *CHEW-GOLDBERGER-LOW-NAMBU (DISPERSION RELATIONS, CHEW-GOLDBERGER-LOW-NAMBU)
- *CHEW-LOW (MODEL, CHEW-LCW)
- *CHEW-MANDELSTAM (MODEL, CHEW-MANDELSTAM)
- CHEW-PIGNOTTI (MODEL, MULTIPERIPHERAL)
- *CHIRAL (GENERALLY: SYMMETRY, CHIRAL)
- CHLORINE
- *CHOU-YANG (MODEL, CHOU-YANG)
- CHROMIUM
- CIM (USE 'MODEL, CONSTITUENT INTERCHANGE')
- CLA (MODEL, CHAN-LOSKIEWICZ-ALLISON)
- CLEBSCH-GORDAN COEFFICIENTS (GROUP THEORY, ANGULAR MOMENTUM)
- CLIFFORD ALGEBRA (GROUP THEORY)
- CLOSED-LOOP DIAGRAM (SEE 'FEYNMAN GRAPH' (RESTRICTED USE))
- CLOSED-ORBIT CORRECTION (CORRECTION, ORBIT)
- *CLOSURE (APPROXIMATION, CLOSURE)
- CLOUD CHAMBER
- *CLUSTER (MODEL, CLUSTER)
- COBALT
- COHEN-TANNOUJJI-HENYEV-KANE (SEE 'MODEL, ABSORPTION')
- *COHERENT INTERACTION (ALSO 'MODEL, COHERENT INTERACTION')
- *COHERENT PRODUCTION
- *COHERENT STATE (SEE 'QUANTUM ELECTRODYNAMICS, COHERENT STATE')
- COHERENT STATE MODEL ('MODEL, GLAUBER'. SEE ALSO 'QUANTUM ELECTRODYNAMICS, COHERENT STATE')
- COIL
- COINCIDENCE CIRCUIT (FAST LOGIC)
- COINCIDENCE METHOD (ELECTRONIC COINCIDENCE METHODS: 'FAST LOGIC')
- COLEMAN-GLASHOW FORMULA (BARYON, MASS DIFFERENCE)
- COLEMAN-WEINBERG INSTABILITY (SYMMETRY, BROKEN)
- *COLLECTIVE (ACCELERATOR, COLLECTIVE)
- COLLIDING BEAMS
- COLLIDING-BEAM DETECTORS (USE APPROPRIATE KEYWORDS FOR CHAMBERS OR DETECTORS (SEE ALSO 'HYBRID SYSTEM'). ADD 'MAGNETIC FIELD' WHERE APPROPRIATE)
- *COLOR (QUARK, COLOR)
- COMMUNICATIONS
- COMMUTATOR RELATIONS
- *COMMUTATOR (FIELD THEORY, COMMUTATOR)
- COMPARISON OF EXPERIMENTAL RESULTS (INTERPRETATION OF EXPERIMENTS)
- *COMPOSITE (MODEL, COMPOSITE)
- COMPOSITE BOSON (MODEL, BOSON + MODEL, COMPOSITE)
- COMPOSITE PARTICLE MODEL (MODEL, COMPOSITE)
- COMPOUND NUCLEUS (NUCLEAR REACTION)
- COMPOUNDS
- COMPTON SCATTERING
- COMPUTER
- CONCRETE
- CONFERENCE
- *CONFIGURATION (INTERFERENCE, CONFIGURATION)
- CONFIGURATION MIXING (INTERFERENCE, CONFIGURATION)
- CONFIGURATION SPACE
- *CONFINEMENT (QUARK, CONFINEMENT)
- *CONFORMAL
- CONFORMAL MAPPING (SEE 'ANALYTIC PROPERTIES')
- CONSERVATION LAW
- *CONSERVED A-V CURRENT (MODEL, CONSERVED A-V CURRENT)
- *CONSERVED VECTOR CURRENT (MODEL, CONSERVED VECTOR CURRENT)
- CONSPIRACY
- *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')
- *CONTINUOUS MASS ('SUM RULE, CONTINUOUS MASS')
- *CONTINUOUS MOMENT ('SUM RULE, CONTINUOUS MOMENT')
- CONTROL SYSTEM
- COPPER
- *CORNELL ES
- CORRECTION
- CORRELATION
- COSMIC RADIATION
- COSTS (SEE 'EXPERIMENTAL EQUIPMENT, PROPOSED' OR 'ACCELERATOR, PROPOSED')
- COTTINGHAM FORMULA (MASS DIFFERENCE)
- COULOMB DISSOCIATION (NUCLEAR REACTION, COULOMB SCATTERING)
- *COULOMB SCATTERING
- COUNTERS AND DETECTORS
- 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 (SEE 'CAMAC SYSTEM')
- *CRITICAL PHENOMENA (FIELD THEORY, CRITICAL PHENOMENA)
- CROSS SECTION (RESTRICTED USE, SEE ALSO 'TOTAL CROSS SECTION' AND 'DIFFERENTIAL CROSS SECTION')

*CROSSING (SYMMETRY, CROSSING)
CRYSTAL
CURIUM
CURRENT (RESTRICTED USE)
CURRENT ALGEBRA
-CURRENT COMMUTATOR RELATIONS (CURRENT ALGEBRA)
-CURRENT COMMUTATORS (CURRENT ALGEBRA)
-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-ZACHARIASEN (MODEL, CUTKOSKY-
ZACHARIASEN)
-CVC (MODEL, CONSERVED VECTOR CURRENT)
CYCLOTRON

C

D 0(1285)
 *D/F RATIO (COUPLING CONSTANT, D/F RATIO)
 -CAC (PULSE-HEIGHT ANALYZER)
 -DALITZ PLOT (KINEMATICS)
 -DAMA ('MODEL, DUAL RESONANCE' AND 'ANALYTIC PROPERTIES')
 *DAMAGE (RADIATION, DAMAGE)
 -CASHEN-FUBINI-GELL-MANN (SEE 'SUM RULE, ADLER-DASHEN-GELL-MANN-FUBINI')
 -DATA ANALYSIS ('INTERPRETATION OF EXPERIMENTS, DATA COMPILATION' OR 'DATA ANALYSIS METHOD')
 DATA ANALYSIS METHOD (RESTRICTED USE)
 -DATA COLLECTION (SEE 'DATA COMPILATION')
 DATA COMPILATION
 -DATA HANDLING (SEE 'COMPUTER')
 -DATA PRESENTATION (SEE 'INTERPRETATION OF EXPERIMENTS' OR 'DATA ANALYSIS METHOD')
 DECAY
 -DECAY CROSS SECTION (DECAY)
 DECAY MODES (RESTRICTED TO THE DETERMINATION OF DECAY-MODE RATIOS OR NEW DECAY MODES)
 -DECAY RATES (USE 'DECAY MODES')
 *DECK ('EFFECT, DECK')
 -DECK MODEL
 *DEEP INELASTIC SCATTERING (ALSO 'MODEL, DEEP INELASTIC SCATTERING')
 -DEFORMABLE SPHERE MODEL (MODEL, PARTICLE)
 -DEFORMED NUCLEUS (NUCLEAR PROPERTIES)
 *DEGENERACY ('EXCHANGE, DEGENERACY')
 *DELBRUECK (SCATTERING, DELBRUECK)
 -DELTA(I)=1/2 (SELECTION RULE, ISOSPIN)
 -DELTA(S)=2 (SELECTION RULE, STRANGENESS)
 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(962) (DELTA(970))
 DELTA(970)
 DENSITY
 *DENSITY MATRIX (GENERALLY 'SPIN, DENSITY MATRIX')
 -DENSITY MODEL (MODEL, DUAL RESONANCE)
 DEPENDENCE (RESTRICTED USE)
 -DEPOLARIZATION
 -DESER-GILBERT-SUDARSHAN (SEE 'SPECTRAL REPRESENTATION')
 *DESY ES (AT HAMBURG)
 *DESY STOR (AT HAMBURG)
 -DETECTION ('COUNTERS AND DETECTORS' OR 'MEASUREMENT' OR 'PARTICLE IDENTIFICATION')
 DEUTERIUM (ALSO 'MODEL, DEUTERIUM')
 DEUTERIUM DEUTERIUM
 DEUTERIUM INTERMEDIATE BCSO
 DEUTERIUM LIGHT NUCLEUS
 -DEUTERIUM MODEL (MODEL, DEUTERIUM)
 DEUTERIUM NUCLEUS
 DEUTERIUM QUARK
 -DEUTERON (DEUTERIUM)
 -DIAGONALIZATION
 DIFFRACTIONAL CROSS SECTION (FOR THE INTEGRATED DIFFERENTIAL CROSS SECTION OF A CHANNEL, USE 'CHANNEL CROSS SECTION')
 DIFFRACTION
 -DIFFRACTION DISSOCIATION (DIFFRACTION, DISSOCIATION)
 -DIFFRACTION EXCITATION (MODEL, DIFFRACTION)
 -DIFFRACTION MODEL ('MODEL, DIFFRACTION' OR, EXPERIMENTAL, 'INTERPRETATION OF EXPERIMENTS, DIFFRACTION')
 -DIFFRACTION SCATTERING ('DIFFRACTION')
 -DIFFRACTION SCATTERING MODEL ('MODEL, DIFFRACTION' OR, EXPERIMENTAL, 'INTERPRETATION OF EXPERIMENTS, DIFFRACTION')

-DIFFRACTIVE EXCITATION (MODEL, DIFFRACTION)
 DIFFUSION
 -DIFFUSION CHAMBER (CLOUD CHAMBER)
 DIGITAL LOGIC
 -DIGITAL-ANALOG CONVERTER (PULSE-HEIGHT ANALYZER)
 -DIGITAL-DIGITAL CIRCUIT (DIGITAL LOGIC)
 -DILATATION (USE 'SYMMETRY, DILATION')
 *DILATION (SYMMETRY, DILATION)
 -DILATON (USE 'SYMMETRY, DILATION')
 *DIP (DIFFERENTIAL CROSS SECTION, DIP)
 -DIP MECHANISM
 *DIPION
 -DIPOLE (SEE 'FORM FACTOR')
 -DIRAC EQUATION ('FIELD EQUATIONS' OR 'QUANTUM MECHANICS, RELATIVISTIC')
 -DIRAC PARTICLE ('FERMION', SEE ALSO 'FIELD EQUATIONS' OR 'ELECTROMAGNETIC, RADIATION')
 *DIRECT REACTION ('NUCLEAR REACTION, DIRECT REACTION')
 -DISCHARGE CHAMBER (SPARK CHAMBER)
 -DISCRIMINATOR (USUALLY 'PULSE-HEIGHT ANALYZER', IN NANOSECOND RANGE: FAST LOGIC)
 *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 FUNCTION
 DOSIMETRY
 -DOUBLE EXCHANGE (SEE 'REGGE POLES, MULTI-REGGE' OR 'RADIATIVE CORRECTION' OR 'FINAL-STATE INTERACTION' OR 'EXCHANGE')
 -DOUBLE EXCITATION (SEE 'EXCITED STATE')
 -DOUBLE PAIR PRODUCTION (PAIR PRODUCTION, MULTIPLE PRODUCTION)
 -DOUBLE PARTIAL WAVE CALCULUS
 -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)
 -DOUBLET (POSSIBLY 'MASS DIFFERENCE')
 -DRELL ('MODEL, DEEP INELASTIC SCATTERING'; FOR DRELL EFFECT, 'MESON, PHOTOPRODUCTION' AND 'EXCHANGE, ONE-MESON')
 -DRELL RATIO
 *DRELL-HEARN-GERASIMOV (SUM RULE, DRELL-HEARN-GERASIMOV)
 *DRELL-LEVY-YAN (MODEL, DRELL-LEVY-YAN)
 -DRELL-YAN ('MODEL, PARTON')
 *DRELL-YAN-WEST (MODEL, DRELL-YAN-WEST)
 -DRESSED PARTICLE (MODEL, PARTICLE)
 -DRIFT CHAMBER (PROPORTIONAL CHAMBER, TIME MEASUREMENT)
 *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 (FIELD THEORY, DUALITY)
 -DUAL LOOP MODEL (FIELD THEORY, DUALITY)
 *DUAL RESONANCE ('MODEL, DUAL RESONANCE')
 DUALITY (USUALLY WITHOUT 'REGGE POLES')
 *DUBNA CYCL
 *DUBNA PS
 *DUERR-PILKUHNS (MODEL, DUERR-PILKUHNS)
 -DUFFIN-KEMMER (FIELD EQUATIONS)
 -DUFFIN-KEMMER-PETIAU (FIELD EQUATIONS)
 -DWBA (APPROXIMATION, DISTORTED WAVE BORN)
 -DYNAMIC GROUP (GROUP THEORY)
 -DYNAMICAL (NOT USED)
 -DYON MODEL
 -DYSON REPRESENTATION (SPECTRAL REPRESENTATION)
 DYSPROSIUM

E

E(1422)
 -ECONOMICS (SEE 'EXPERIMENTAL EQUIPMENT, PROPOSED' OR 'ACCELERATOR, PROPOSED')
 EFFECT (RESTRICTED USE)
 -EFFECTIVE ACTION
 *EFFECTIVE LAGRANGIANS ('CURRENT ALGEBRA, EFFECTIVE LAGRANGIANS', OR 'FIELD THEORY, EFFECTIVE LAGRANGIANS')
 *EFFECTIVE POTENTIAL (APPROXIMATION, EFFECTIVE POTENTIAL)
 *EFFECTIVE RANGE (APPROXIMATION, EFFECTIVE RANGE)
 -EIGHTFOLD WAY (SYMMETRY, SU(3))
 *EIKONAL ('APPROXIMATION, EIKONAL' OR 'REGGE CUT')
 EINSTEINIUM
 EJECTION
 -ELASTIC CROSS SECTION ('ELASTIC SCATTERING')
 ELASTIC SCATTERING
 -ELASTICITY (ELASTIC SCATTERING, CHANNEL CROSS SECTION)
 ELECTRIC FIELD
 ELECTRIC MOMENT
 ELECTRICAL ENGINEERING
 ELECTRICITY
 ELECTROFISSION
 ELECTROMAGNETIC
 -ELECTROMAGNETIC FORM FACTOR (USE 'FORM FACTOR')
 ELECTROMAGNETIC INTERACTION (ALSO: 'MODEL, ELECTROMAGNETIC INTERACTION')
 -ELECTROMAGNETIC MIXING (INTERFERENCE, ELECTROMAGNETIC (RESTRICTED USE))
 ELECTRON (USE ALSO WHEN CHARGE IS IRRELEVANT)
 ELECTRON ANTI-KO
 ELECTRON ANTI-N
 ELECTRON ANTI-P
 ELECTRON ANTIBARYON
 ELECTRON ANTIHYPERON
 ELECTRON ANTILAMBDA
 ELECTRON ANTINUCLEON
 ELECTRON ANTISIGMA
 ELECTRON ANTIXI
 ELECTRON BARYON
 ELECTRON BARYON RESONANCE
 ELECTRON BOSON
 ELECTRON DEUTERIUM
 ELECTRON ELECTRON (USE ALSO WHEN CHARGE IS IRRELEVANT)
 ELECTRON HADRON
 ELECTRON HYPERON
 ELECTRON INTERMEDIATE BOSON
 ELECTRON K
 ELECTRON K+
 ELECTRON K-
 ELECTRON KO
 ELECTRON LAMBDA
 ELECTRON LIGHT NUCLEUS
 ELECTRON MESON
 ELECTRON MESON RESONANCE
 ELECTRON MUON
 ELECTRON MUON+
 ELECTRON MUON-
 ELECTRON N
 -ELECTRON NEUTRINO (NEUTRINO, ELECTRON)
 ELECTRON NUCLEON
 ELECTRON NUCLEUS
 ELECTRON OMEGA-
 ELECTRON P
 ELECTRON PI
 ELECTRON PI+
 ELECTRON PI-
 ELECTRON PIO
 ELECTRON POSITRON
 ELECTRON QUARK
 *ELECTRON RING (ACCELERATOR, ELECTRON RING)

ELECTRON SIGMA
 ELECTRON SIGMA+
 ELECTRON SIGMA-
 ELECTRON SIGMAO
 ELECTRON SYNCHROTRON
 ELECTRON VECTOR MESON
 ELECTRON XI
 ELECTRON XI-
 ELECTRON XIO
 ELECTRONICS
 ELECTROPRODUCTION (ALWAYS ASSIGNED WHEN PARTICLES ARE ELECTROPRODUCED)
 *ELECTROSTATIC
 -ELECTROSTATIC ACCELERATOR (ACCELERATOR, ELECTROSTATIC)
 -ELECTROSTATIC SEPARATOR (USE 'PARTICLE SEPARATOR')
 -ELEMENTARY LENGTH (SEE 'FUNDAMENTAL CONSTANT, LENGTH')
 ELEMENTS
 EMISSION
 -ENCODER (SEE 'PULSE-HEIGHT ANALYZER' OR 'READOUT')
 ENERGY DEPENDENCE
 ENERGY LEVELS
 ENERGY LOSS
 ENERGY SPECTRUM
 -ENERGY-RANGE RELATION ('ENERGY LOSS')
 *ENHANCEMENT ('TOTAL CROSS SECTION, ENHANCEMENT', 'DIFFERENTIAL CROSS SECTION, ENHANCEMENT', 'CROSS SECTION, ENHANCEMENT', 'MASS, ENHANCEMENT')
 EPSILON(700)
 -EQUAL-TIME COMMUTATOR ('CURRENT ALGEBRA' OR 'FIELD THEORY')
 -EQUILIBRIUM (SEE 'MECHANICS, STATISTICS')
 *EQUIVALENT PHOTON (APPROXIMATION, EQUIVALENT PHOTON)
 ERBIUM
 *EREVAN ES
 -ETA ETA' MIXING' (INTERFERENCE, ETA(549)-ETA'(958))
 -ETA(1070) (SEE 'S*(1000)')
 ETA(549)
 *ETA(549)-ETA'(958)
 -ETA(700-1000) (EPS(LGN(700))
 ETA'(958)
 EUROPIUM
 -EVAPORATION MODEL (MULTIPLE PRODUCTION)
 EXCHANGE
 -EXCHANGE DEGENERACY ('REGGE POLES' AND 'EXCHANGE, DEGENERACY')
 -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')
 *EXPERIMENTAL EQUIPMENT
 *EXPERIMENTAL METHODS
 *EXPERIMENTAL RESULTS
 *EXTENDED PARTICLE (MODEL, EXTENDED PARTICLE)
 *EXTENSIVE (SHOWERS, EXTENSIVE)
 *EXTERNAL ('SYMMETRY, EXTERNAL')
 -EXTERNAL FIELD

F*F MESON DOMINANCE (MODEL, F MESON DOMINANCE)
 F(1260)
 -F/D RATIO (COUPLING CONSTANT, D/F RATIO)
 F(1514)
 -FABRI PLOT (KINEMATICS)
 *FACTORIZATION (REGGE POLES, FACTORIZATION)
 -FADDEEV EQUATIONS (MANY-BODY PROBLEM)
 -FAN-IN, FAN-OUT (FAST LOGIC)
 FAST LOGIC
 -FEEDBACK (SEE 'COUPLING'. IN CASE OF ACCELERATORS
 SEE 'BEAM OSCILLATION' OR 'RF SYSTEM' OR
 'CONTROL SYSTEM')
 -FELDMAN ('MODEL, WEINBERG')
 *FERMI GAS (MODEL, FERMI GAS)
 -FERMI INTERACTION (SEE 'FERMION')
 *FERMI-YANG (MODEL, FERMI-YANG)
 FERMION (ALSO 'MODEL, FERMION + STATISTICS' FOR
 FERMION MODEL)
 FERMION ANTI-KO
 FERMION ANTI-N
 FERMION ANTI-P
 FERMION ANTIBARYON
 -FERMION ANTIFERMION INTERACTION (USE 'FERMION,
 ANTI-PARTICLE' AND 'FERMION FERMION,
 INTERACTION')
 FERMION ANTIHYPERON
 FERMION ANTILAMBDA
 FERMION ANTINEUTRINO
 FERMION ANTINUCLEON
 FERMION ANTISIGMA
 FERMION ANTIXI
 FERMION BARYON
 FERMION BARYON RESONANCE
 FERMION BOSON
 FERMION DEUTERIUM
 FERMION ELECTRON
 FERMION FERMION
 FERMION HADRON
 FERMION HYPERON
 FERMION INTERMEDIATE BOSON
 FERMION K
 FERMION K+
 FERMION K-
 FERMION KO
 FERMION LAMBDA
 FERMION LIGHT NUCLEUS
 FERMION MESON
 FERMION MESON RESONANCE
 -FERMION MODEL (STATISTICS + 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 SIGMAO
 FERMION VECTOR MESON
 FERMION XI
 FERMION XI-
 FERMION XIO

FERMIUM
 -FESR (SUM RULE, FINITE ENERGY)
 *FEYNMAN (SCALING, FEYNMAN)
 -FEYNMAN FLUID (USE 'SCALING, FEYNMAN')
 -FEYNMAN GAS (USE 'SCALING, FEYNMAN')
 -FEYNMAN GAUGE (FIELD THEORY, GAUGE)
 FEYNMAN GRAPH (RESTRICTED USE)
 -FEYNMAN INTEGRAL (USE 'FEYNMAN GRAPH')
 -FEYNMAN MODEL
 -FEYNMAN PATH (SEE 'ANALYTIC PROPERTIES')
 -FEYNMAN RULE (SEE 'FEYNMAN GRAPH' OR
 'PERTURBATION THEORY')
 -FEYNMAN-KISSLINGER-RAVNDAL MODEL (QUARK)
 -FFAG (SYNCHROTRON OR CYCLOTRON)
 FIELD EQUATIONS
 -FIELD THEORETICAL MODEL (MODEL, FIELD THEORY
 (RESTRICTED USE))
 FIELD THEORY
 -FIERZ CROSSING SYMMETRY (MODEL, FOUR-FERMION
 INTERACTION)
 FINAL STATE (RESTRICTED USE, EXAMPLE:
 'FINAL STATE, (P 2PI)')
 FINAL-STATE INTERACTION
 *FINE STRUCTURE ('ATOMIC PHYSICS, FINE STRUCTURE')
 *FINITE ENERGY ('SUM RULE, FINITE ENERGY')
 *FINITE MASS ('SUM RULE, FINITE MASS')
 *FINITE MOMENT ('SUM RULE, FINITE MOMENT')
 *FIREBALL (MODEL, FIREBALL)
 FISSION
 -FIT ('INTERPRETATION OF EXPERIMENTS....'
 (FOLLOWED BY THEORETICAL ADDITIVES). FOR NEW
 METHOD USE 'DATA ANALYSIS METHOD')
 *FIXED POLE (MODEL, FIXED POLE)
 *FIXED-ANGLE
 *FLASH TUBE (SPARK CHAMBER, FLASH TUBE)
 *FLUID ANALOGY (MODEL, FLUID ANALOGY)
 FLUORINE
 FLUX
 FLUX DISTRIBUTION
 *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 (GENERALLY 'MASS, FORMULA')
 *FOUR-COMPONENT NEUTRINO (MODEL, FOUR-COMPONENT
 NEUTRINO)
 *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')
 FRANCIUM
 *FRASCATI ES
 *FRASCATI STOR
 -FREQUENCY GENERATION (SEE 'MICROWAVES')
 -FREQUENCY MEASUREMENT (SEE 'MICROWAVES')
 *FRIEDMON (MODEL, FRIEDMON)
 -FRITZSCH-GELL-MANN (LIGHT CONE BEHAVIOR)
 *FROISSART BOUND (HIGH ENERGY BEHAVIOR, FROISSART
 BOUND)
 -FROISSART-GRIBOV MODEL ('PARTIAL WAVE,
 DISPERSION RELATIONS')
 *FUBINI-FURLAN (MODEL, FUBINI-FURLAN)
 FUNDAMENTAL CONSTANT
 -FUNDAMENTAL LENGTH (FUNDAMENTAL CONSTANT, LENGTH)
 FUSION
 -F1 MESON RESONANCE ('PI/RHO(1540)')
 -F1(1540) (PI/RHO(1540))

- G MESON RESONANCE ('RHO(1660)')
- *G PARITY (QUANTUM NUMBER, G PARITY)
G(1680)
- G-2 (MAGNETIC MOMENT)
- GADOLINIUM
- GALILEI GROUP (SEE 'GROUP THEORY')
- GALLIUM
- GAMMA MONOCHROMATOR (PHOTON, MONOCHROMATIC BEAM)
- GAS
- GAS ANALOG MODEL
- GATE (LINEAR GATE: ANALOG CIRCUIT, LOGIC GATE: DIGITAL LOGIC)
- *GAUGE ('INVARIANCE, GAUGE' OR 'TRANSFORMATION, GAUGE' OR 'FIELD THEORY, GAUGE')
- GEIGER-MUELLER COUNTER
- *GELL-MANN-LOW (RENORMALIZATION, GELL-MANN-LOW)
- *GELL-MANN-OAKES-RENNER ('MODEL, GELL-MANN-OAKES-RENNER')
- *GELL-MANN-OKUBO (MODEL, GELL-MANN-OKUBO)
- GELL-MANN-SHARP-WAGNER (COUPLING, π -RHO(765)-OMEGA(784))
- *GENERAL (RELATIVITY THEORY, GENERAL)
- GENERALIZED VECTOR DOMINANCE ('MODEL, VECTOR DOMINANCE')
- *GEORGI-GLASHOW (MODEL, GEORGI-GLASHOW)

- GERMANIUM
- GERMANIUM-LITHIUM COUNTER (SOLID-STATE COUNTER) **G**
- GIANT RESONANCE (NUCLEAR PROPERTIES + RESONANCE)
- GLASS
- *GLAUBER (MODEL, GLAUBER)
- GLAUBER-MARGOLIS MODEL (MODEL, GLAUBER)
- *GLUON (MODEL, GLUON)
- GOLD
- GOLDBERGER-TREIMAN RELATION (MODEL, PCAC + π , DECAY)
- GOLDSTONE BOSON (FIELD THEORY, GOLDSTONE THEOREM)
- GOLDSTONE MODEL (USE 'SYMMETRY, SPONTANEOUSLY BROKEN')
- *GOLDSTONE THEOREM (FIELD THEORY, GOLDSTONE THEOREM)
- GRAVITATION
- GRAVITATIONAL RADIATION ('GRAVITATION, RADIATION')
- GRAVITATIONAL WAVES ('GRAVITATION, RADIATION')
- *GRAVITON (POSTULATED PARTICLE, GRAVITON)
- GREEN FUNCTION ('MATHEMATICS' OR 'FIELD THEORY')
- *GRIBOV (MODEL, GRIBOV)
- GRIBOV-POMERANCHUK (ANALYTIC PROPERTIES) GROUP THEORY
- GUPTA-BLEULER (QUANTUM ELECTRODYNAMICS)

H HADRON
 HADRON ANTI-KO
 HADRON ANTI-N
 HADRON ANTI-P
 HADRON ANTIBARYON
 HADRON ANTIHYPERON
 HADRON ANTILAMBDA
 HADRON ANTINUCLEON
 HADRON ANTISIGMA
 HADRON ANTIXI
 HADRON BARYON
 HADRON BARYON RESONANCE
 HADRON BOSON
 HADRON DEUTERIUM
 HADRON HADRON
 HADRON HYPERON
 HADRON INTERMEDIATE BOSON
 HADRON K
 HADRON K+
 HADRON K-
 HADRON KO
 HADRON LAMBDA
 HADRON LIGHT NUCLEUS
 HADRON MESON
 HADRON MESON RESONANCE
 -HADRON MODEL (MODEL, PARTICLE)
 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 SIGMAO
 HADRON VECTOR MESON
 HADRON XI
 HADRON XI-
 HADRON XIO
 HAFNIUM
 -HAGEDORN MODEL (MODEL, THERMODYNAMICAL)
 *HAN-NAMBU (MODEL, HAN-NAMBU)
 *HARARI (MODEL, HARARI)
 -HARARI-FREUND MODEL (SEE *DUALITY*)
 -HARARI-ROSNER MODEL (SEE *DUALITY*)
 *HARD CORE (MODEL, HARD CORE)
 -HARD MESON (CURRENT ALGEBRA, EFFECTIVE LAGRANGIANS)
 -HARD PHOTON (*RADIATIVE CORRECTION*)
 -HARD PION (CURRENT ALGEBRA, EFFECTIVE LAGRANGIANS)
 -HARMONIC OSCILLATOR (MODEL, OSCILLATOR)

*HARTREE-FOCK (*APPROXIMATION, HARTREE-FOCK* FOR SELF-CONSISTENT CALCULATIONS IN QUANTUM MECHANICS)
 HEALTH PHYSICS
 HEAT ENGINEERING
 *HEAVY
 -HEAVY ION (*ION, HEAVY*. HEAVY-ION PHYSICS IS INCLUDED WHEN PARTICLE ENERGY IS >= 100 MEV/NUCLEON. HEAVY-ION ACCELERATOR TECHNOLOGY IS GENERALLY INCLUDED)
 *HEAVY LEPTON (*POSTULATED PARTICLE, HEAVY LEPTON*)
 -HEAVY WATER (DEUTERIUM, WATER)
 HELICITY
 HELIUM
 -HIDDEN VARIABLES (QUANTUM MECHANICS)
 *HIGGS (MODEL, HIGGS)
 -HIGGS-KIBBLE (*MODEL, WEINBERG*)
 *HIGH (MOMENTUM TRANSFER, HIGH)
 HIGH ENERGY BEHAVIOR (ONLY FOR THEORETICAL MODELS IN THE ASYMPTOTIC RANGE, ONLY USED WHERE CONTENT IS NOT IMPLICITLY CONTAINED IN OTHER KEYWORDS SUCH AS *REGGE POLES*)
 -HIGH SPIN (SPIN, HIGH)
 *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 KO ANTI-KO))
 -HILBERT SPACE (QUANTUM MECHANICS)
 -HOODSCOPE (*LOCATION DETECTION*, BUT NOT USED FOR COMBINATIONS INVOLVING CHAMBERS)
 -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* OR *STRANGENESS*)
 HYPERFINE STRUCTURE
 HYPERFRAGMENT
 -HYPERNUCLEUS (*HYPERFRAGMENT*)
 HYPERON
 HYPERON ANTIHYPERON
 HYPERON BARYON RESONANCE
 HYPERON DEUTERIUM
 HYPERON HYPERON
 HYPERON INTERMEDIATE BOSON
 HYPERON LIGHT NUCLEUS
 HYPERON NUCLEUS
 HYPERON QUARK
 HYPERON VECTOR MESON

*IMPACT PARAMETER (MODEL, IMPACT PARAMETER)
 *IMPULSE (APPROXIMATION, IMPULSE)
 INCLUSIVE REACTION
 *INDEPENDENT EMISSION (MODEL, INDEPENDENT EMISSION)
 *INDEPENDENT PARTICLE (MODEL, INDEPENDENT PARTICLE)
 INDIUM
 -INELASTIC SCATTERING (EITHER, E.G., 'ELECTRON P, INTERACTION' OR, E.G., 'ELECTRON P, DEEP INELASTIC SCATTERING')
 -INFINITE MOMENTUM
 *INFINITE-COMPONENT WAVE EQUATION (CURRENT ALGEBRA, INFINITE-COMPONENT WAVE EQUATION)
 -INFRAPARTICLE
 *INFRARED PROBLEM ('FIELD THEORY, INFRARED PROBLEM OR 'QUANTUM ELECTRODYNAMICS, INFRARED PROBLEM')
 INJECTION
 INORGANIC COMPOUNDS
 -INSTABILITY (SEE 'BEAM OSCILLATION' OR 'SYNCHROTRON OSCILLATION' OR 'BETATRON OSCILLATION')
 *INTERACTION (FOR NOVEL INTERACTIONS: 'MODEL, INTERACTION')
 INTERFERENCE
 INTERMEDIATE BOSON (ALSO 'MODEL, INTERMEDIATE BOSON')
 -INTERMEDIATE NUCLEUS (USE 'EXCITED NUCLEUS')

-INTERMEDIATE STATE (SEE 'EXCHANGE' OR 'FINAL STATE')
 *INTERNAL (SYMMETRY, INTERNAL)
 -INTERNUCLEAR CASCADE ('CASCADE')
 *INTERPRETATION OF EXPERIMENTS
 *INTRANUCLEAR CASCADE (MODEL, INTRANUCLEAR CASCADE)
 *INTRODUCTORY (RESTRICTED USE)
 INVARIANCE
 -INVARIANT PHASE SPACE (MODEL, STATISTICAL)
 -INVERSE
 IODINE
 ION (SEE ALSO 'HEAVY ION')
 -ION RING ACCELERATOR ('ACCELERATOR, ELECTRON RING')
 IONIZATION
 -IONIZATION CALORIMETER (IONIZATION CHAMBER + BEAM CALIBRATION)
 IONIZATION CHAMBER
 -IPS (MODEL, STATISTICAL)
 IRIIDIUM
 IRON
 -ISING MODEL (SEE 'MECHANICS, STATISTICS')
 *ISOBAR (MODEL, ISOBAR)
 *ISOCRONOUS (CYCLOTRON, ISOCRONOUS)
 ISOSPIN
 -ISOTOPE (NUCLIDE)

J(3100)
 -JACOB-SLANSKY ('MODEL, MULTIPLE PRODUCTION')
 *JAPANESE NL PS (AT IBARAKI)
 *JET (MODEL, JET)
 *JIN-MARTIN BOUND (HIGH ENERGY BEHAVIOR, JIN-MARTIN BOUND)
 -JOHNSON-BAKER-WILLEY (QUANTUM ELECTRODYNAMICS)
 *JOHNSON-TREIMAN (SYMMETRY, JOHNSON-TREIMAN + SYMMETRY, SU(6))

*JONA-LASINIO-NAMBU (MODEL, JONA-LASINIO-NAMBU)
 *JOSEPHSON (EFFECT, JOSEPHSON)
 -JOST FUNCTION (POTENTIAL SCATTERING)
 -JOST-LEHMANN-GYSON REPRESENTATION (SPECTRAL REPRESENTATION)

K
 K ANTI-KO
 K ANTI-N
 K ANTI-P
 K ANTIBARYON
 K ANTILAMBDA
 K ANTINUCLEON
 K ANTISIGMA
 K BARYON
 K BARYON RESONANCE
 K DEUTERIUM
 K HYPERON
 K INTERMEDIATE BOSON
 K K
 K K+
 K K-
 K KO
 K LAMBDA
 K LIGHT NUCLEUS
 K MESON RESONANCE
 K N
 K NUCLEON
 K NUCLEUS
 K P
 K QUARK
 K SIGMA
 K VECTOR MESON
 *K(L)
 *K(S)
 *K(S)-K(L)
 -K(1240) (Q REGION)
 -K(1280-1400) (Q REGION)
 K(1420)
 K+
 K+ ANTI-N
 K+ ANTI-P
 K+ ANTIBARYON
 K+ ANTINUCLEON
 K+ BARYON
 K+ BARYON RESONANCE
 K+ DEUTERIUM
 K+ HYPERON
 K+ INTERMEDIATE BOSON
 K+ K+
 K+ K-
 K+ LAMBDA
 K+ LIGHT NUCLEUS
 K+ MESON RESONANCE
 K+ N
 K+ NUCLEON
 K+ NUCLEUS
 K+ P
 K+ QUARK
 K+ SIGMA
 K+ VECTOR MESON
 -K* EXCHANGE (EXCHANGE, K*(892))
 K*(892)
 K-
 K- ANTI-N
 K- ANTI-P

K- ANTIBARYON
 K- ANTINUCLEON
 K- BARYON
 K- BARYON RESONANCE
 K- DEUTERIUM
 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 (SEE 'PI K' AND 'PARTIAL-WAVE ANALYSIS')
 *KHARKOV LINAC
 -KHURI REPRESENTATION (REGGE POLES, MODEL)
 -KIBBLE-HIGGS ('MODEL, WEINBERG')
 -KICKER MAGNET (PULSED MAGNET)
 *KIKKAWA-SAKITA-VIRASORO (MODEL, KIKKAWA-SAKITA-VIRASORO)
 -KIKKAWA-SAKITA-VIRASORO MODEL
 -KINEMATIC SUPERSTRUCTURE (DUALITY) KINEMATICS
 -KLEIN-GORDON EQUATION ('FIELD EQUATIONS' OR 'QUANTUM MECHANICS, RELATIVISTIC')
 *KNO (SCALING, KNO)
 -KOBAYASHI-NIelsen ('MODEL, DUAL RESONANCE')
 -KOBAYASHI-NIelsen-OLESEN SCALING (SCALING, KNO)
 -KROLL-RUDERMAN (FIELD THEORY, LOW-ENERGY THEOREM)
 KRYPTON
 -KUTI-WEISSKOPF (SEE 'MODEL, QUARK PARTON' AND 'SCALING' AND 'DEEP INELASTIC SCATTERING')
 KO
 KO ANTI-N
 KO ANTI-P
 KO ANTIBARYON
 KO ANTINUCLEON
 KO BARYON
 KO BARYON RESONANCE
 KO DEUTERIUM
 KO INTERMEDIATE BOSON
 KO K+
 KO K-
 KO KO
 KO LIGHT NUCLEUS
 KO MESON RESONANCE
 KO N
 KO NUCLEON
 KO NUCLEUS
 KO P
 KO QUARK
 KO VECTOR MESON

L(1770)
 *LADDER (APPROXIMATION, LADDER)
 -LAGRANGIAN MODEL (FIELD THEORY)
 -LAMB SHIFT (RADIATIVE CORRECTION + ATOM, ENERGY LEVELS, POSSIBLY ALSO: 'QUANTUM ELECTRODYNAMICS, VALIDITY TEST')
 LAMBDA
 LAMBDA ANTILAMBDA
 LAMBDA BARYON RESONANCE
 LAMBDA DEUTERIUM
 LAMBDA INTERMEDIATE BOSON
 LAMBDA LAMBDA
 LAMBDA LIGHT NUCLEUS
 LAMBDA NUCLEUS
 LAMBDA QUARK
 LAMBDA SIGMA
 LAMBDA VECTOR MESON
 LAMBDA(1405)
 LAMBDA(1815)
 LAMBDA(1830)
 LAMBDA(2100)
 LAMBDA(2350)
 LAMBDA(2585)
 LAMBDA*(1520)
 LAMBDA*(1670)
 LAMBDA**(1690)
 *LAMPF LINAC (AT LOS ALAMOS)
 -LANDAU MODEL (MODEL, HYDRODYNAMICAL)
 LANTHANUM
 *LASER (GENERALLY, 'OPTICS, LASER')
 LAWRENCIUM
 LEAD
 *LEADING PARTICLE (MULTIPLE PRODUCTION, LEADING PARTICLE)
 LECTURES
 -LEE (SEE 'MODEL, WEINBERG')
 -LEE MODEL (MODEL, FIELD THEORY)
 -LEE-PRENTKI-ZUMINO MODEL
 -LEFT-RIGHT SYMMETRY (SEE 'MULTIPLE PRODUCTION, CORRELATION')
 -LEHMANN ELLIPSE (ANALYTIC PROPERTIES)
 -LEHMANN-KAELLEN-UMEZAWA (SPECTRAL REPRESENTATION)
 -LEHMANN-SYMANZIK-ZIMMERMANN FORMALISM (FIELD THEORY)
 *LENGTH ('SCATTERING, LENGTH' OR 'RADIATION, LENGTH')
 *LENINGRAD CYCL
 *LENINGRAD PS
 LEPTON
 LEPTON ANTI-KO
 LEPTON ANTI-N
 LEPTON ANTI-P
 LEPTON ANTIBARYON
 LEPTON ANTIHYPERON
 LEPTON ANTILAMBDA
 -LEPTON ANTILEPTON INTERACTION (USE 'LEPTON, ANTI-PARTICLE' AND 'LEPTON LEPTON, INTERACTION')
 LEPTON ANTINEUTRINO
 LEPTON ANTINEUTRINO
 LEPTON ANTISIGMA
 LEPTON ANTIXI
 LEPTON BARYON
 LEPTON BARYON RESONANCE
 LEPTON BOSON
 LEPTON DEUTERIUM
 LEPTON ELECTRON
 LEPTON FERMION
 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 NEUTRINO
 LEPTON NUCLEON
 LEPTON NUCLEUS
 -LEPTON NUMBER ('QUANTUM NUMBER, LEPTON')
 LEPTON OMEGA-
 LEPTON P
 LEPTON PI
 LEPTON PI+
 LEPTON PI-
 LEPTON PIO
 LEPTON POSITRON
 LEPTON QUARK
 LEPTON SIGMA
 LEPTON SIGMA+
 LEPTON SIGMA-
 LEPTON SIGMAO
 LEPTON VECTOR MESON
 LEPTON XI
 LEPTON XI-
 LEPTON XIO
 LEPTONIC DECAY
 -LEPTONIC QUARK (LEPTON, QUARK)
 -LEPTOPRODUCTION
 -LEVEL CONVERTER (DIGITAL LOGIC)
 *LIE (GROUP THEORY, LIE)
 LIFETIME (USAGE IN ACCORDANCE WITH ROSENFELD TABLES)
 -LIGHT CONE ALGEBRA (LIGHT CONE BEHAVIOR)
 LIGHT CONE BEHAVIOR
 LIGHT NUCLEUS
 LIGHT NUCLEUS INTERMEDIATE BOSON
 LIGHT NUCLEUS LIGHT NUCLEUS
 LIGHT NUCLEUS NUCLEUS
 LIGHT NUCLEUS QUARK
 -LIMITER (FAST LOGIC)
 -LIMITING FRAGMENTATION (MODEL, FRAGMENTATION)
 -LINE REVERSAL
 LINEAR ACCELERATOR
 -LINEAR AMPLIFIER (ANALOG CIRCUIT)
 -LINEAR GATE (ANALOG CIRCUIT)
 -LIPP-MANN-SCHWINGER (QUANTUM MECHANICS, SCATTERING)
 -LIPP-MANN-SCHWINGER-ZIMMERMANN FORMALISM (AXIOMATIC FIELD THEORY)
 LIQUID
 -LIQUID ANALOGY MODEL (MODEL, FLUID ANALOGY)
 LITHIUM
 -LOCALITY (AXIOMATIC FIELD THEORY)
 -LOCALIZATION (AXIOMATIC FIELD THEORY)
 LOCATION DETECTION
 -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 (MULTIPLE PRODUCTION, LONGITUDINAL PHASE SPACE)
 -LOOP DIAGRAM (FEYNMAN GRAPH)
 *LORENTZ ('GROUP THEORY, LORENTZ' (RESTRICTED USE) OR 'INVARIANCE, LORENTZ' (RESTRICTED USE) OR 'TRANSFORMATION, LORENTZ')
 *LOW (MOMENTUM TRANSFER, LOW)
 LOW TEMPERATURE
 *LOW-ENERGY THEOREM (FIELD THEORY, LOW-ENERGY THEOREM)
 -LPS ANALYSIS ('MULTIPLE PRODUCTION, LONGITUDINAL PHASE SPACE ANALYSIS')
 -LSZ FORMALISM (FIELD THEORY)
 *LUMINOSITY (STORAGE RING, LUMINOSITY)
 *LUND ES
 LUTETIUM

L

M MAGNESIUM
MAGNET
*MAGNETIC (SEE ALSO 'MAGNETIC FIELD' OR 'MAGNETIC MOMENT' OR 'POSTULATED PARTICLE, MAGNETIC MONOPOLE' OR 'MAGNETIC SPECTROMETER')
-MAGNETIC DETECTOR (IN CASE OF LARGE-ANGLE DETECTORS USE APPROPRIATE KEYWORDS FOR CHAMBERS AND ADD 'MAGNETIC FIELD'. FOR NARROW-ANGLE DETECTORS USE 'MAGNETIC SPECTROMETER')
MAGNETIC FIELD (ALSO FOR STORAGE-RING EXPERIMENTS WHEN APPLICABLE)
MAGNETIC MOMENT
*MAGNETIC MONOPOLE ('POSTULATED PARTICLE, MAGNETIC MONOPOLE')
MAGNETIC SPECTROMETER
*MAGNETOSTRICTIVE (SPARK CHAMBER, MAGNETOSTRICTIVE)
MANDELSTAM REPRESENTATION
MANGANESE
MANUAL
*MAN-Y-BODY PROBLEM
*MANY-BOSON (EXCHANGE, MANY-BOSON)
MASS
MASS DIFFERENCE
-MASS RATIO
MASS SPECTRUM (RESTRICTED USE)
-MASS SPLITTING (MASS DIFFERENCE)
-MASS-ZERO PIONS (PI, MASSLESS)
*MASSIVE
*MASSLESS
MATHEMATICS
MATTER
-MAXIMUM-LIKELIHOOD METHOD (SEE 'DATA ANALYSIS METHOD')
MEASUREMENT
MECHANICAL ENGINEERING
MECHANICS
-MEDICINE (SEE 'HEALTH PHYSICS')
-MELLIN TRANSFORMATION (TRANSFORMATION)
*MELOSH (TRANSFORMATION, MELOSH)
-MEMORY (FREQUENTLY 'PULSE-HEIGHT ANALYZER')
MENDELEVIUM
MERCURY
-MESIC ATOM ('MESON, ATOM')
-MESIC MOLECULE ('MESON, ATOM' AND 'MESON, MOLECULE')
MESON (ALSO: 'MODEL, MESON')
MESON ANTI-KO
MESON ANTI-N
MESON ANTI-P
MESON ANTIBARYON
MESON ANTIHYPERON
MESON ANTILAMBDA
MESON ANTINUCLEON
MESON ANTISIGMA
MESON ANTIXI
MESON BARYON
MESON BARYON RESONANCE
MESON BOSON
MESON DEUTERIUM
*MESON DOMINANCE (MODEL, MESON DOMINANCE)
-MESON EXCHANGE (EXCHANGE, MESON)
MESON HYPERON
MESON INTERMEDIATE BOSON
MESON K
MESON K+
MESON K-
MESON KO
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 DEUTERIUM
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 SIGMAO
MESON RESONANCE VECTOR MESON
MESON RESONANCE XI
MESON RESONANCE XI-
MESON RESONANCE XIO
MESON SIGMA
MESON SIGMA+
MESON SIGMA-
MESON SIGMAO
MESON VECTOR MESON
MESON XI
MESON XI-
MESON XIO
METAL
-MICROCAUSALITY (AXIOMATIC FIELD THEORY, CAUSALITY)
-MICROTRON (CYCLOTRON, ELECTRON)
MICROWAVES
MINERAL
*MISSING-MASS (SPECTROMETER, MISSING-MASS)
-MIXING ('INTERFERENCE' (RESTRICTED USE))
MODEL (WITHOUT SECOND TERM: RESTRICTED USE)
-MOEBIUS TRANSFORMATION (TRANSFORMATION)
MOLECULAR BIOLOGY
*MOLECULE
MOLYBDENUM
MOMENT
MOMENTUM
MOMENTUM TRANSFER
MONITORING
*MONOCHROMATIC BEAM (PHOTON, MONOCHROMATIC BEAM)
*MONTE CARLO (NUMERICAL CALCULATIONS, MONTE CARLO)
*MOSCOW ITC PS
*MOSCOW RI PS
*MUELLER ('MODEL, MUELLER')
*MULTI-REGGE (REGGE POLES, MULTI-REGGE)
-MULTILOOP (FIELD THEORY, DUALITY)
*MULTIMESON (EXCHANGE, MULTIMESON)
*MULTIPERIPHERAL (MODEL, MULTIPERIPHERAL)
*MULTIPHOTON (EXCHANGE, MULTIPHOTON + PERTURBATION THEORY)
*MULTIPION (EXCHANGE, MULTIPION)
MULTIPLE
MULTIPLE PRODUCTION
MULTIPLE SCATTERING
MULTIPLY
MULTIPLICITY
*MULTIPOLE ('PARTIAL-WAVE ANALYSIS, MULTIPOLE')
-MULTIPOMERON (USE 'POMERON')
-MULTIREGGEON (SEE 'REGGE POLES')
MUON
MUON ANTI-KO
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 DEUTERIUM
MUON HADRON
MUON HYPERON
MUON INTERMEDIATE BOSON
MUON K
MUON K+
MUON K-
MUON KO
MUON LAMBDA
MUON LIGHT NUCLEUS
MUON MESON
MUON MESON RESONANCE
MUON MUON
MUON MUON+
MUON MUON-
MUON N

M

-MUON NEUTRINO (NEUTRINO, MUON)
 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 SIGMAO
 MUON VECTOR MESON
 MUON XI
 MUON XI-
 MUON XIO
 MUON+
 MUON+ ANTI-KO
 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+ DEUTERIUM
 MUON+ HADRON
 MUON+ HYPERON
 MUON+ INTERMEDIATE BOSON
 MUON+ K
 MUON+ K+
 MUON+ K-
 MUON+ KO
 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+ SIGMAO
 MUON+ VECTOR MESON
 MUON+ XI
 MUON+ XI-
 MUON+ XIO
 MUON-
 MUON- ANTI-KO
 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- DEUTERIUM
 MUON- HADRON
 MUON- HYPERON
 MUON- INTERMEDIATE BOSON
 MUON- K
 MUON- K+
 MUON- K-
 MUON- KO
 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- SIGMAO
 MUON- VECTOR MESON
 MUON- XI
 MUON- XI-
 MUON- XIO
 -MUONIC ATOM (*MUON, ATOM*)
 -MUONIUM (ELECTRON MUON, ATOM)
 -MUONPRODUCTION (ELECTROPRODUCTION, MUON)

N
 N ANTI-N
 N ANTIHYPERON
 N ANTILAMBDA
 N ANTISIGMA
 N ANTIXI
 N BARYON RESONANCE
 N DEUTERIUM
 N HYPERON
 N INTERMEDIATE BOSON
 N LAMBDA
 N LIGHT NUCLEUS
 N N
 N NUCLEUS
 N OMEGA-
 N QUARK
 N SIGMA
 N SIGMA+
 N SIGMA-
 N SIGMAO
 N VECTOR MESON
 N XI
 N XI-
 N XIO
 N(1670)
 N(1688)
 N(1860)
 N(2190)
 N(2220)
 N(2650)
 N(3030)
 -N-PION EXCHANGE (EXCHANGE, MULTIPION)
 *N-POINT FUNCTION ('DUALITY, N-POINT FUNCTION'
 OR 'VENEZIANO MODEL, N-POINT FUNCTION' OR
 'MODEL, N-POINT FUNCTION' OR 'MANY-BODY
 PROBLEM')
 -N/D METHOD (PARTIAL WAVE, DISPERSION RELATIONS)
 N*(1470)
 N*(1520)
 N*(1535)
 N*(1700)
 N*(1780)
 -NAKANISHI REPRESENTATION (SPECTRAL REPRESENTATION
 -NAMBU (MODEL, FIELD THEORY)
 -NAMBU-GOLDSTONE (USE 'SYMMETRY,
 SPONTANEOUSLY BROKEN')
 -NANOSECOND ELECTRONICS (FAST LOGIC)
 *NARROW RESONANCE ('APPROXIMATION, NARROW
 RESONANCE')
 NEODYMIUM
 NEON
 NEPTUNIUM
 -NEUTRAL (SEE 'NEUTRAL CURRENT' OR 'NEUTRAL
 PARTICLE')
 NEUTRAL CURRENT
 NEUTRAL PARTICLE
 -NEUTRALS (USE 'NEUTRAL PARTICLE')
 -NEUTRETTO (NEUTRINO, MUON)
 NEUTRINO
 NEUTRINO ANTI-KO
 NEUTRINO ANTI-N
 NEUTRINO ANTI-P
 NEUTRINO ANTIBARYON
 NEUTRINO ANTIHYPERON
 NEUTRINO ANTILAMBDA
 NEUTRINO ANTINEUTRINO
 NEUTRINO ANTINUCLEON
 NEUTRINO ANTISIGMA
 NEUTRINO ANTIXI
 NEUTRINO BARYON
 NEUTRINO BARYON RESONANCE
 NEUTRINO BOSON
 NEUTRINO DEUTERIUM
 NEUTRINO ELECTRON
 NEUTRINO HADRON
 NEUTRINO HYPERON
 NEUTRINO INTERMEDIATE BOSON
 NEUTRINO K
 NEUTRINO K+
 NEUTRINO K-
 NEUTRINO KO
 NEUTRINO LAMBDA
 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
 -NEUTRON DETECTION (PARTICLE IDENTIFICATION, N)
 -NEVEU-SCHWARZ MODEL ('MODEL, DUAL RESONANCE')
 *NEW ELEMENT ('ELEMENT, NEW ELEMENT')
 NEW PARTICLE
 NICKEL
 *NIMROD PS (AT CHILTON)
 *NINA ES (AT DARESBURY)
 NIOBIUM
 NITROGEN
 NOBELIUM
 -NOETHER'S THEOREM ('GROUP THEORY' AND
 'CONSERVATION LAW')
 *NONABELIAN (FIELD THEORY, NONABELIAN)
 *NONLEPTONIC DECAY
 -NONLOCAL
 -NONPOLYNOMIAL LAGRANGIANS (FIELD THEORY +
 RENORMALIZATION)
 NONRELATIVISTIC
 *NONSTRANGE ('RESONANCE, NONSTRANGE')
 -NORMAL PRODUCT
 *NOVA (MODEL, NOVA)
 *NOVOSIBIRSK STOR
 NUCLEAR EMULSION
 NUCLEAR ENGINEERING
 NUCLEAR FORCE
 -NUCLEAR MEDICINE (HEALTH PHYSICS)
 NUCLEAR MODEL (RESTRICTED USE: NUCLEAR-MODEL
 PAPERS ARE NOT GENERALLY INCLUDED)
 NUCLEAR PHYSICS
 NUCLEAR PROPERTIES
 NUCLEAR REACTION
 -NUCLEAR RESONANCE (SEE 'EXCITED NUCLEUS')
 NUCLEON
 NUCLEON ANTI-N
 NUCLEON ANTI-P
 NUCLEON ANTIHYPERON
 NUCLEON ANTILAMBDA
 NUCLEON ANTINUCLEON
 NUCLEON ANTISIGMA
 NUCLEON ANTIXI
 NUCLEON BARYON RESONANCE
 NUCLEON DEUTERIUM
 NUCLEON HYPERON
 NUCLEON INTERMEDIATE BOSON
 -NUCLEON ISOBAR (NUCLEON RESONANCE)
 NUCLEON LAMBDA
 NUCLEON LIGHT NUCLEUS
 NUCLEON N
 NUCLEON NUCLEON
 NUCLEON NUCLEUS
 NUCLEON OMEGA-
 NUCLEON P
 NUCLEON QUARK
 NUCLEON RESONANCE
 NUCLEON SIGMA
 NUCLEON SIGMA+
 NUCLEON SIGMA-
 NUCLEON SIGMAO
 NUCLEON VECTOR MESON
 NUCLEON XI
 NUCLEON XI-
 NUCLEON XIO
 NUCLEUS
 NUCLEUS INTERMEDIATE BOSON
 NUCLEUS NUCLEUS
 NUCLEUS QUARK
 NUCLIDE
 NUMERICAL CALCULATIONS
 NUMERICAL MATHEMATICS

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*O(3) (SYMMETRY, O(3))
 *O(3,1) (SYMMETRY, O(3,1))
 *O(4) (SYMMETRY, O(4))
 *O(4,2)
 -OBEC (EXCHANGE, ONE-BOSON)
 *OCTET DOMINANCE (MODEL, OCTET DOMINANCE)
 -OFF-MASS-SHELL (MODEL, OFF-SHELL)
 *OFF-SHELL (MODEL, OFF-SHELL)
 -OMEGA SPECTROMETER (SEE 'MAGNETIC SPECTROMETER')
 OMEGA(1675)
 OMEGA(784)
 *OMEGA(784)-PHI(1019) (INTERFERENCE, OMEGA(784)-
 PHI(1019))
 OMEGA-
 OMEGA- BARYON RESONANCE
 OMEGA- DEUTERIUM
 OMEGA- INTERMEDIATE BOSON
 OMEGA- LIGHT NUCLEUS
 OMEGA- NUCLEUS
 OMEGA- OMEGA-
 OMEGA- QUARK
 OMEGA- VECTOR MESON
 -OMEGA-PHI INTERFERENCE (INTERFERENCE, OMEGA(784)-
 PHI(1019))
 -OMEGA-RHO INTERFERENCE (INTERFERENCE, RHO(765)-
 OMEGA(784))
 *ON-LINE ('COMPUTER, ON-LINE' (NGT 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-LOOP APPROXIMATION (USE 'FEYNMAN GRAPH')
 *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)
 -OPE (EXCHANGE, ONE-PION)
 -OPE MODEL (EXCHANGE, ONE-PION)
 *OPERATOR ALGEBRA ('FIELD THEORY,
 OPERATOR ALGEBRA')
 *OPERATOR PRODUCT ('FIELD THEORY,
 OPERATOR PRODUCT')
 -OPERATOR PRODUCT EXPANSION ('FIELD THEORY,
 OPERATOR PRODUCT')
 *OPTICAL (MODEL, OPTICAL)
 -OPTICAL THEOREM (UNITARITY, TOTAL CROSS SECTION)
 OPTICS
 ORBIT
 ORGANIC COMPOUNDS
 *ORSAY CYCL
 *ORSAY LINAC
 *ORSAY STOR
 *OSCILLATOR (MODEL, OSCILLATOR)
 OSMIUM
 *OVERLAPPING RESONANCES (MODEL, OVERLAPPING
 RESONANCES)
 OXYGEN

P
P ANTI-N
P ANTIHYPERON
P ANTILAMBDA
P ANTISIGMA
P ANTIXI
P BARYON RESONANCE
P DEUTERIUM
P HYPERON
P INTERMEDIATE BOSON
P LAMBDA
P LIGHT NUCLEUS
P N
P NUCLEUS
P OMEGA-
P P
P QUARK
P SIGMA
P SIGMA+
P SIGMA-
P SIGMA0
P VECTOR MESON
P XI
P XI-
P XIO
-P-WAVE (PARTIAL WAVE)
*PADE (APPROXIMATION, PADE)
PAIR
PAIR PRODUCTION
PALLADIUM
*PARAMETRIZATION (FOR FUNCTIONAL FITS USE
'INTERPRETATION OF EXPERIMENTS, PARAMETRIZATION'
OR 'NUMERICAL MATHEMATICS, PARAMETRIZATION', FOR
NEW METHODS USE 'DATA ANALYSIS METHOD')
*PARASTATISTICS (STATISTICS,
PARASTATISTICS)
PARITY
-PARITY CHECK (DIGITAL LOGIC)
PARTIAL WAVE
PARTIAL-WAVE ANALYSIS
-PARTIALLY CONSERVED AXIAL-VECTOR CURRENT
(MODEL, PCAC)
-PARTIALLY CONSERVED VECTOR CURRENT (MODEL, PCVC)
PARTICLE
PARTICLE ANTIPARTICLE
PARTICLE IDENTIFICATION
-PARTICLE MODELS ('MODEL, PARTICLE' (RESTRICTED
USE) OR 'MODEL, FERMION' OR 'MODEL, BARYON' OR
'MODEL, BOSON' OR 'MODEL, MESON' OR 'MODEL,
PHOTON')
PARTICLE SEPARATOR
PARTICLE SOURCE
-PARTICLE-HOLE MODEL (NUCLEAR PROPERTIES)
*PARTON ('MODEL, PARTON'. SEE ALSO 'MODEL, QUARK
PARTON')
-PATTERN RECOGNITION (USE 'READOUT')
*PCAC (MODEL, PCAC)
*PCVC (MODEL, PCVC)
*PERIPHERAL (MODEL, PERIPHERAL)
PERTURBATION THEORY
-PEYROU PLOT (KINEMATICS)
-PHASE SHIFT (PARTIAL WAVE)
-PHASE SPACE ('KINEMATICS' FREQUENTLY ALSO
'MODEL, STATISTICAL')
-PHASE TRANSITION (SEE 'FIELD THEORY, CRITICAL
PHENOMENA')
-PHENOMENOLOGY (NOT USED)
PHI(1019)
-PHI(1650) (OMEGA(1675))
-PHI-TO-THE-NTH MODEL ('MODEL, FIELD THEORY')
PHOSPHORUS
-PHOTOABSORPTION (PHOTON, ABSORPTION)
PHOTOFISSION
-PHOTOMULTIPLIER (GENERALLY NOT INCLUDED. SEE
SCINTILLATION COUNTER)
PHOTON (ALSO: 'MODEL, PHOTON')
PHOTON ANTI-KO
PHOTON ANTI-N
PHOTON ANTI-P
PHOTON ANTIBARYON
PHOTON ANTIHYPERON
PHOTON ANTILAMBDA
PHOTON ANTINEUTRINO
PHOTON ANTINUCLEON
PHOTON ANTISIGMA
PHOTON ANTIXI
PHOTON BARYON
PHOTON BARYON RESONANCE
PHOTON BOSON
PHOTON DEUTERIUM
PHOTON ELECTRON
-PHOTON EXCHANGE (EXCHANGE, PHOTON)
PHOTON FERMION

PHOTON HAERON
PHOTON HYPERON
PHOTON INTERMEDIATE BOSON
PHOTON K
PHOTON K+
PHOTON K-
PHOTON KO
PHOTON LAMBDA
PHOTON LEPTON
PHOTON LIGHT NUCLEUS
PHOTON MESON
PHOTON MESON RESONANCE
PHOTON MUON
PHOTON MUON+
PHOTON MUON-
PHOTON N
PHOTON NEUTRINO
PHOTON NUCLEON
PHOTON NUCLEUS
PHOTON OMEGA-
PHOTON P
PHOTON PHOTON
PHOTON PI
PHOTON PI+
PHOTON PI-
PHOTON PIO
PHOTON POSITRON
PHOTON QUARK
PHOTON SIGMA
PHOTON SIGMA+
PHOTON SIGMA-
PHOTON SIGMA0
-PHOTON SPLITTING (ELECTROMAGNETIC INTERACTION,
HIGHER-ORDER)
PHOTON VECTOR MESON
PHOTON XI
PHOTON XI-
PHOTON XIO
PHOTOPRODUCTION
PI
PI ANTI-KO
PI ANTI-N
PI ANTI-P
PI ANTIBARYON
PI ANTIHYPERON
PI ANTILAMBDA
PI ANTINUCLEON
PI ANTISIGMA
PI ANTIXI
PI BARYON
PI BARYON RESONANCE
PI DEUTERIUM
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 PI-
PI PIO
PI QUARK
PI SIGMA
PI SIGMA+
PI SIGMA-
PI SIGMA0
PI VECTOR MESON
PI XI
PI XI-
PI XIO
PI(1016)
-PI(1640) (A3(1640))
-PI(975) (DELTA(970))
PI+
PI+ ANTI-KO
PI+ ANTI-N
PI+ ANTI-P
PI+ ANTIBARYON
PI+ ANTIHYPERON
PI+ ANTILAMBDA
PI+ ANTINUCLEON
PI+ ANTISIGMA
PI+ ANTIXI
PI+ BARYON

PI+ BARYON RESONANCE
 PI+ DEUTERIUM
 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+ SIGMAO
 PI+ VECTOR MESON
 PI+ XI
 PI+ XI-
 PI+ XIO
 PI-
 PI- ANTI-KO
 PI- ANTI-N
 PI- ANTI-P
 PI- ANTIBARYON
 PI- ANTIHYPERON
 PI- ANTILAMBDA
 PI- ANTINUCLEON
 PI- ANTISIGMA
 PI- ANTIXI
 PI- BARYON
 PI- BARYON RESONANCE
 PI- DEUTERIUM
 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- SIGMAO
 PI- VECTOR MESON
 PI- XI
 PI- XI-
 PI- XIO
 PI/RHO(1540)
 -PION EXCHANGE ('EXCHANGE, ONE-PION' OR 'EXCHANGE,
 MULTIPION')
 *PIONIZATION (MULTIPLE PRODUCTION, PIONIZATION)
 PIO
 PIO ANTI-KO
 PIO ANTI-N
 PIO ANTI-P
 PIO ANTIBARYON
 PIO ANTIHYPERON
 PIO ANTILAMBDA
 PIO ANTINUCLEON
 PIO ANTISIGMA
 PIO ANTIXI
 PIO BARYON
 PIO BARYON RESONANCE
 PIO DEUTERIUM
 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 PIO
 PIO QUARK
 PIO SIGMA
 PIO SIGMA+
 PIO SIGMA-
 PIO SIGMAO
 PIO VECTOR MESON
 PIO XI
 PIO XI-
 PIO XIO
 PLASMA
 PLASTICS
 PLATINUM
 -PLOTING METHODS (SEE 'DATA ANALYSIS METHOD'
 (RESTRICTED USE))
 PLUTONIUM
 -POINCARÉ GROUP (GROUP THEORY, LORENTZ)
 *POKORSKI-SATZ-SCHILLING (MODEL, POKORSKI-SATZ-
 SCHILLING)
 *POLARIZABILITY
 POLARIZATION
 *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')
 -POSITIVITY (ANALYTIC PROPERTIES?)
 POSITRON
 POSITRON ANTI-KO
 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 DEUTERIUM
 POSITRON HADRON
 POSITRON HYPERON
 POSITRON INTERMEDIATE BOSON
 POSITRON K
 POSITRON K+
 POSITRON K-
 POSITRON KO
 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 SIGMAO
 POSITRON VECTOR MESON
 POSITRON XI
 POSITRON XI-
 POSITRON XIO
 -POSITRONIUM ('ELECTRON POSITRON, ATOM')
 POSTULATED PARTICLE
 POTASSIUM
 POTENTIAL
 -POTENTIAL MODEL (POTENTIAL SCATTERING)
 POTENTIAL SCATTERING

P POWER ENGINEERING
 POWER SUPPLY
 PRASEODYMIUM
 -PREDICTION (PROPOSED EXPERIMENT, NUMERICAL CALCULATIONS)
 -PREPROCESSING (USE 'READOUT')
 *PRIMAKOFF (EFFECT, PRIMAKOFF)
 *PRIMARY (USE IN 'COSMIC RADIATION, PRIMARY')
 -PRIMEVAL FIREBALL (ASTROPHYSICS)
 *PRINCETON PS
 -PRISM PLOT (SEE 'DATA ANALYSIS METHOD' (RESTRICTED USE))
 -PROBABILITY ('STATISTICS')
 PRODUCTION
 -PRODUCTION CROSS SECTION ('PRODUCTION' + (GENERALLY) 'TOTAL CROSS SECTION')
 PROGRAMMING
 -PROJECT ('EXPERIMENTAL EQUIPMENT, PROPOSED' OR 'ACCELERATOR, PROPOSED')
 PROMETHIUM
 PROPAGATOR
 PROPORTIONAL CHAMBER
 PROPORTIONAL COUNTER
 -PROPORTIONAL WIRE CHAMBER (PROPORTIONAL CHAMBER)

*PROPOSED ('EXPERIMENTAL EQUIPMENT, PROPOSED' OR 'ACCELERATOR, PROPOSED')
 PROPOSED EXPERIMENT
 PROTACTINIUM
 PROTON SYNCHROTRON
 *PSEUDOSCALAR (RESTRICTED USE)
 *PSEUDOSCALAR MESON DOMINANCE (MODEL, PSEUDOSCALAR MESON DOMINANCE)
 *PSEUDOVECTOR (RESTRICTED USE, WHEN 'PSEUDOVECTOR' + 'VECTOR MESON' APPLICABLE, USE 'VECTOR MESON' ONLY)
 -PSI(3100) (J(3100))
 PSI(3700)
 -PSI(4100) (X(4100))
 -PULSE ANALYZER (PULSE-HEIGHT ANALYZER)
 -PULSE GENERATOR (NOT INCLUDED)
 -PULSE LIMITER (FAST LOGIC)
 -PULSE SHAPER (FAST LOGIC)
 -PULSE SPECTROMETER (MAGNETIC SPECTROMETER + (COINCIDENCE METHOD OR SPARK CHAMBER))
 PULSE-HEIGHT ANALYZER
 PULSED MAGNET

Q Q REGION
 -QC/2 SPECTROMETER (MAGNETIC SPECTROMETER)
 QUADRUPOLE LENS
 -QUANTAMETER ('IONIZATION CHAMBER' AND 'BEAM MONITORING')
 -QUANTIZATION ('QUANTUM MECHANICS', BUT 'FIELD THEORY' FOR SECOND QUANTIZATION)
 QUANTUM ELECTRODYNAMICS
 QUANTUM MECHANICS
 QUANTUM NUMBER
 QUARK
 QUARK ANTIQUARK

QUARK INTERMEDIATE BOSON
 -QUARK MODEL (QUARK)
 *QUARK PARTON (MODEL, QUARK PARTON)
 QUARK QUARK
 -QUARK SEARCH ('QUARK, POSTULATED PARTICLE', WHEN FOUND: 'QUARK, NEW PARTICLE')
 *QUARTET (MODEL, QUARTET)
 *QUASICLASSICAL (MODEL, QUASICLASSICAL)
 -QUASIELASTIC SCATTERING (USE ELASTIC SCATTERING)
 *QUASIOPTICAL (MODEL, QUASIOPTICAL)
 *QUASIPOTENTIAL (MODEL, QUASIPOTENTIAL)

RADIATION
 -RADIATION LENGTH (RADIATION, LENGTH)
 *RADIATIVE CAPTURE
 RADIATIVE CORRECTION (FOR ELECTRON SCATTERING ONLY. IN OTHER CASES SEE 'FEYNMAN GRAPH')
 *RADIATIVE DECAY
 RADIOACTIVITY
 -RADIOCHEMISTRY ('RADIOACTIVITY' AND 'CHEMISTRY')
 RADIUM
 RADON
 -RAPID CYCLING BUBBLE CHAMBER (USE 'BUBBLE CHAMBER')
 *RAPIDITY
 *RARITA-SCHWINGER (MODEL, RARITA-SCHWINGER)
 REACTION AMPLITUDE (RESTRICTED USE)
 -REACTION MECHANISM
 READOUT
 -REAL TIME (SEE 'CONTROL SYSTEM' AND 'COMPUTER, ON-LINE')
 RECDIL
 *REFLECTION
 *REGENERATION ('KO, REGENERATION')
 REGGE CUT ('REGGE CUT, MODEL' ONLY FOR PAPERS TREATING MODELS)
 REGGE POLES
 -REGGEON (SEE 'REGGE POLES')
 -REGGEON COUPLING (REGGE POLES, COUPLING)
 *REGGEON-PARTICLE (SEE 'SCATTERING, REGGEON-PARTICLE' OR 'COUPLING, REGGEON-PARTICLE')
 -REGULARIZATION (RENORMALIZATION)
 *RELATIVISTIC
 -RELATIVISTIC QUANTUM MECHANICS (QUANTUM MECHANICS, RELATIVISTIC)
 RELATIVITY THEORY
 RENORMALIZATION
 -REPRESENTATION (SEE 'GROUP THEORY' GR 'MANDELSTAM REPRESENTATION')
 -REPRESENTATION THEORY (SEE 'GROUP THEORY')

-REPULSION
 -REPULSIVE CORE
 -RESCATTERING (SEE 'MULTIPLE SCATTERING')
 RESONANCE (RESTRICTED USE FOR 'MODEL, RESONANCE')
 *RESONANCE DOMINANCE (MODEL, RESONANCE DOMINANCE)
 -RESONANCE INTERACTION MODEL (MODEL, OVERLAPPING RESONANCES)
 -RESONANCE MIXING (INTERFERENCE, RESONANCE)
 *RESONANCE SCATTERING (MODEL, RESONANCE SCATTERING)
 -RESONANCE SPECTROSCOPY ('MULTIPLY' OR 'MASS, SPECTRA')
 REVIEW
 -RF SEPARATOR (PARTICLE SEPARATOR)
 RF SYSTEM
 RHENIUM
 -RHO DOMINANCE MODEL (MODEL, VECTOR DOMINANCE)
 -RHO EXCHANGE (EXCHANGE, RHO(765))
 -RHO(1660) (G(1680))
 RHO(1710)
 RHO(765)
 RHO(765)+
 RHO(765)-
 *RHO(765)-OMEGA(784) (INTERFERENCE, RHO(765)-OMEGA(784))
 -RHO-OMEGA (INTERFERENCE, RHO(765)-OMEGA(784))
 RHO(1600)
 RHODIUM
 -ROPER RESONANCE (N(1470))
 *ROSENBLUTH FORMULA ('EXCHANGE, ONE-PHOTON' +, E.G., 'ELECTRON P, ROSENBLUTH FORMULA')
 -ROSS-STODOLSKY (RHO(765), PHOTOPRODUCTION)
 -ROTATION
 *ROTATIONAL STATE (MODEL, ROTATIONAL STATE)
 *ROTATOR (MODEL, ROTATOR)
 RUBBER
 RUBIDIUM
 RUTHENIUM

R

S (1930)
S*(1000)
S-MATRIX
-S-WAVE ('PARTIAL WAVE')
*SACLAY CYCL
*SACLAY LINAC
*SACLAY PS
*SAKATA (MODEL, SAKATA)
-SALAM-STRATHDEE (FIELD THEORY, SUPERSYMMETRY*)
-SALAM-WEINBERG MODEL (MODEL, WEINBERG)
SAMARIUM
-SAXON-WOODS ('POTENTIAL' OR 'POTENTIAL SCATTERING')
*SCALAR (RESTRICTED USE)
*SCALAR MESON (EXCHANGE, SCALAR MESON)
*SCALAR MESON DOMINANCE (MODEL, SCALAR MESON DOMINANCE)
-SCALER ('DIGITAL LOGIC')
SCALING (ALSO FOR SCALE INVARIANCE AND SCALING VIOLATION)
SCANDIUM
SCATTERING (RESTRICTED USE)
-SCATTERING AMPLITUDE ('S-MATRIX' IN FIELD THEORY, IN PHENOMENOLOGY DISREGARDED)
-SCATTERING LENGTH ('SCATTERING, LENGTH')
-SCHWINGER MODEL
-SCHWINGER SOURCE THEORY (FIELD THEORY)
*SCHWINGER TERMS ('CURRENT ALGEBRA, SCHWINGER TERMS')
SCINTILLATION COUNTER
-SCINTILLATOR (NOT INCLUDED IN SCOPE)
*SCREENING (EFFECT, SCREENING)
-SEARCH (POSTULATED PARTICLE)
-SECOND QUANTIZATION (FIELD THEORY)
-SECOND-CLASS CURRENT ('WEAK INTERACTION, CURRENT')
-SECONDARY PARTICLE
SECONDARY RADIATION
-SECONDARY-EMISSION MONITORING (BEAM MONITORING)
-SECTOR-FOCUSING CYCLOTRON (CYCLOTRON, ISOCRONOUS)
-SECURITY (SEE 'SHIELDING' OR 'HEALTH PHYSICS')
SELECTION RULE
SELENIUM
-SELF-CONSISTENT CALCULATION ('BOOTSTRAP' OR, IF QUANTUM MECHANICS, 'APPROXIMATION, HARTREE-FOCK')
-SELF-COUPLING
-SELF-ENERGY ('RENORMALIZATION' OR 'PROPAGATOR')
-SELF-INTERACTION ('RENORMALIZATION' OR 'PROPAGATOR')
-SEMICLASSICAL APPROXIMATION
SEMICONDUCTOR
-SEMIINCLUSIVE REACTION (INCLUSIVE REACTION)
*SEPARABLE POTENTIAL (MODEL, SEPARABLE POTENTIAL)
*SEPARATED-ORBIT (CYCLOTRON, SEPARATED-CRBIT)
-SEPTUM MAGNET (SEE 'MAGNET, EJECTION')
*SERPUKHOV PS
-SEXTUPOLE LENS (QUADRUPOLE LENS, SPECIAL FOCUSING)
-SHADOW SCATTERING ('MODEL, OPTICAL')
*SHELL (MODEL, SHELL)
SHIELDING
*SHORT-DISTANCE BEHAVIOR (FIELD THEORY, SHORT-DISTANCE BEHAVIOR)
*SHORT-RANGE (USED ONLY AS 'CORRELATION, SHORT-RANGE'. NOT USED FOR SHORT-RANGE FORCES)
-SHOWER COUNTER (SEE 'TOTAL-ABSORPTION COUNTER')
SHOWERS
-SHRINKAGE ('HIGH ENERGY BEHAVIOR')
SIGMA (ALSO 'MODEL, SIGMA'. SEE ALSO 'SYMMETRY, CHIRAL' FOR SIGMA TERM MODEL)
SIGMA ANTISIGMA
SIGMA BARYON RESONANCE
SIGMA DEUTERIUM
SIGMA INTERMEDIATE BOSON
-SIGMA MODEL (MODEL, FIELD THEORY)
SIGMA NUCLEUS
SIGMA QUARK
-SIGMA TERM MODEL (SYMMETRY, CHIRAL)
SIGMA VECTOR MESON
SIGMA(1385)
SIGMA(1765)
SIGMA(1915)
SIGMA(2030)
SIGMA(2250)
SIGMA(2455)
SIGMA(2620)
SIGMA+
SIGMA+ BARYON RESONANCE
SIGMA+ DEUTERIUM
SIGMA+ INTERMEDIATE BOSON
SIGMA+ NUCLEUS
SIGMA+ QUARK
SIGMA+ SIGMA-
SIGMA+ SIGMAO
SIGMA+ VECTOR MESON
SIGMA-
SIGMA- BARYON RESONANCE
SIGMA- DEUTERIUM
SIGMA- INTERMEDIATE BOSON
SIGMA- NUCLEUS
SIGMA- QUARK
SIGMA- VECTOR MESON
SIGMA*(1670)
SIGMA*(1750)
SIGMA*(1940)
SIGMAO
SIGMAO BARYON RESONANCE
SIGMAO DEUTERIUM
SIGMAO INTERMEDIATE BOSON
SIGMAO NUCLEUS
SIGMAO QUARK
SIGMAO SIGMA-
SIGMAO VECTOR MESON
SILICON
SILVER
*SIN CYCL ZUERICH
-SINGLE LOOP ('MODEL, DUAL RESONANCE' OR 'DUALITY, FIELD THEORY')
-SKELETON (FEYNMAN GRAPH)
*SL(2,C) (SYMMETRY, SL(2,C))
*SLAC LINAC (AT PALO ALTO)
*SLAC STOR (AT PALO ALTO)
*SMALL-ANGLE
-SMOKATRON (ACCELERATOR, ELECTRON RING)
*SO(2,2)
*SO(3)
SODIUM
*SOEDING (MODEL, SOEDING)
-SOFT PHOTON (RADIATIVE CORRECTION)
-SOFT PIONS ('CURRENT ALGEBRA, EFFECTIVE LAGRANGIANS' OR 'MODEL, PCAC')
SOLID-STATE COUNTER
SOLIDS
-SONIC SPARK CHAMBER (SPARK CHAMBER, ACOUSTIC)
-SOURCE (SEE 'FIELD THEORY' OR 'PARTICLE SOURCE')
-SOURCE ALGEBRA ('CURRENT ALGEBRA')
*SPACE
-SPACE-TIME
-SPALLATION (USE 'FISSION')
SPARK CHAMBER
-SPARK COUNTER ('COUNTERS AND DETECTORS')
*SPECIAL FOCUSING (MAGNET, SPECIAL FOCUSING)
*SPECTATOR ('MODEL, SPECTATOR', POSSIBLY ALSO 'MODEL, DEUTERIUM')
SPECTRA
*SPECTRAL FUNCTION ('ANALYTIC PROPERTIES, SPECTRAL FUNCTION')
SPECTRAL REPRESENTATION
SPECTROMETER
SPIN
-SPIN FLIP
-SPIN-PARITY ANALYSIS (PARTIAL-WAVE ANALYSIS)
*SPINLESS (RESTRICTED USE; NOT USED FOR BOSONS)
SPINOR
-SPINOR FIELD THEORY ('FIELD THEORY, SPINOR')
-SPLITTING (SEE 'MASS DIFFERENCE')
*SPONTANEOUSLY BROKEN (SYMMETRY, SPONTANEOUSLY BROKEN)
-SPURION (SEE 'SYMMETRY, U(1)')
-SQUARE-WELL POTENTIAL (POTENTIAL SCATTERING)
*STACKING (INJECTION, STACKING)
*STANFORD LINAC MK3
-STATIC MODEL (SEE 'MODEL, CHEW-LOW')
*STATISTICAL (MODEL, STATISTICAL)
-STATISTICAL BOOTSTRAP (BOOTSTRAP, STATISTICAL)
-STATISTICAL MECHANICS (MECHANICS, STATISTICS)
-STATISTICAL TENSOR ('SPIN, DENSITY MATRIX')
STATISTICS
STEEL
*STICHEL THEOREM (SELECTION RULE, STICHEL THEOREM)
*STICHEL-SCHOLZ (MODEL, STICHEL-SCHOLZ)
-STOCHASTIC MODEL (MODEL, STATISTICAL)
*STODOLSKY-SAKURAI (MODEL, STODOLSKY-SAKURAI)
STORAGE RING
STRANGE PARTICLE
STRANGENESS
STREAMER CHAMBER
*STRING (MODEL, STRING)
*STRIP (APPROXIMATION, STRIP)
*STRONG ABSORPTION (MODEL, STRONG 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')
 *SU(N) (SYMMETRY, SU(N))
 *SU(N) X SU(N)
 *SU(1,1)
 *SU(2) (SYMMETRY, SU(2))
 *SU(2) X SU(2) (SYMMETRY, SU(2) X SU(2))
 *SU(2) X U(1)
 *SU(2) X U(1) X SU(3)
 *SU(2)W (SYMMETRY, SU(2)W)
 *SU(2,2)
 *SU(3) (SYMMETRY, SU(3))
 *SU(3) X SU(3) (SYMMETRY, SU(3) X SU(3))
 *SU(4)
 *SU(4) X SU(4)
 *SU(6) (SYMMETRY, SU(6))
 *SU(6) X O(3)
 *SU(6)W (SYMMETRY, SU(6)W)
 *SUGAWARA (MODEL, SUGAWARA)
 SULFUR

SUM RULE
 SUPERCONDUCTING ('ACCELERATOR, SUPERCONDUCTING',
 'LINEAR ACCELERATOR, SUPERCONDUCTING', 'MAGNET,
 SUPERCONDUCTING')
 *SUPERCONVERGENCE (SUM RULE, SUPERCONVERGENCE)
 -SUPERFIELD (FIELD THEORY, SUPERSYMMETRY)
 -SUPERGAUGE (FIELD THEORY, SUPERSYMMETRY)
 -SUPERMULTIPLY
 -SUPERPOSITION ('INTERFERENCE' (RESTRICTED USE))
 *SUPERPROPAGATOR (PROPAGATOR, SUPERPROPAGATOR)
 *SUPERSELECTION RULE (SUM RULE, SUPERSELECTION
 RULE)
 *SUPERSYMMETRY (FIELD THEORY, SUPERSYMMETRY)
 -SUPERWEAK INTERACTION ('MODEL, INTERACTION',
 USUALLY IN CONNECTION WITH STRANGE PARTICLES)
 SYMMETRY
 -SYMPLECTIC GROUP
 SYNCHRO-CYCLOTRON
 -SYNCHROPHASOTRON (SYNCHROTRON OR PROTON
 SYNCHROTRON OR ELECTRON SYNCHROTRON)
 SYNCHROTRON
 SYNCHROTRON OSCILLATION

-T-MATRIX (S-MATRIX)
 -T'HOOFT (MODEL, WEINBERG)
 TABLES
 *TACHYON ('POSTULATED PARTICLE, TACHYON')
 -TADPOLE (FEYNMAN GRAPH)
 *TAGGED BEAM ('PHOTON, TAGGED BEAM' OR 'ELECTRON,
 TAGGED BEAM')
 -TALK (FOR CONFERENCE LECTURES AND REVIEWS,
 'LECTURES' OR 'REVIEW' WILL BE USED. OTHER
 CONFERENCE TALKS HAVE ENTRY (TALK) AFTER TITLE.)
 -TAMM-DANCOFF APPROXIMATION
 TANTALUM
 TARGET
 -TARGET POLARIZATION ('TARGET, POLARIZATION')
 -TCP ('INVARIANCE, CPT' OR 'VIOLATION, CPT')
 TECHNETIUM
 -TELESCOPE ('COINCIDENCE METHOD')
 TELLURIUM
 TEMPERATURE
 *TENSOR (RESTRICTED USE)
 *TENSOR MESON DOMINANCE (MODEL, TENSOR MESON
 DOMINANCE)
 TERBIUM
 THALLIUM
 THEORY OF ELEMENTARY PARTICLES
 *THERMODYNAMICAL (MODEL, THERMODYNAMICAL)
 THERMODYNAMICS
 THESIS (INCLUDING SOME MASTERS' THESES)
 -THIRING MODEL ('MODEL, FIELD THEORY')
 THORIUM
 -THREE-BODY ANNIHILATION (ANNIHILATION, MULTIPLE
 PRODUCTION)
 THREE-BODY PROBLEM
 -THREE-MESON (SEE 'EXCHANGE, MULTIMESON')
 -THREE-PHOTON (SEE 'EXCHANGE, MULTIPHOTON')
 -THREE-PION (SEE 'EXCHANGE, MULTIPION')
 -THREE-POINT FUNCTION ('VENEZIANO MODEL, VERTEX
 FUNCTION' OR 'DUALITY, VERTEX FUNCTION')
 THRESHOLD
 THULIUM
 *TIME MEASUREMENT (SEE ALSO 'TIME-OF-FLIGHT
 METHOD')
 *TIME REVERSAL ('INVARIANCE, TIME REVERSAL' OR
 'VIOLATION, TIME REVERSAL')
 TIME-OF-FLIGHT METHOD (ELECTRONIC TIME-OF-FLIGHT
 METHODS: FAST LOGIC)
 -TIME-TO-PULSE-HEIGHT CONVERTER (FAST LOGIC)
 TIN
 TITANIUM
 *TOKYO ES
 -TOLLER POLE MODEL (PARTIAL WAVE + ANALYTIC
 PROPERTIES)

*TOMSK ES
 -TOPOLOGICAL CROSS SECTION ('TOTAL CROSS
 SECTION')
 TOTAL CROSS SECTION (SEE ALSO 'CHANNEL CROSS
 SECTION')
 TOTAL-ABSORPTION COUNTER
 *TOUSCHEK (EFFECT, TOUSCHEK)
 -TPC (TIME-TO-PULSE-HEIGHT CONVERTER:
 'FAST LOGIC')
 -TRACK CHAMBER
 TRACK DATA ANALYSIS
 TRACK MEASURING
 TRACK PHOTOGRAPHY
 *TRACK SENSITIVE (COUNTERS AND DETECTORS, TRACK
 SENSITIVE)
 TRACKS
 -TRAJECTORY (SEE 'REGGE POLES' OR 'REGGE CUT'.
 NOT USED FOR PARTICLE TRAJECTORY)
 TRANSFORMATION
 *TRANSITION
 -TRANSITION RADIATION (RADIATION, TRANSITION)
 -TRANSITION RADIATION DETECTOR ('RADIATION,
 TRANSITION' AND 'COUNTERS AND DETECTORS')
 -TRANSMISSION (USE 'ABSORPTION')
 *TRANSURANIUM (ELEMENTS, TRANSURANIUM)
 *TRANSVERSE (RESTRICTED USE, SEE ALSO
 'TRANSVERSE MOMENTUM')
 -TRANSVERSE BEAM OSCILLATION (BETATRON
 OSCILLATION)
 TRANSVERSE MOMENTUM
 -TREE APPROXIMATION (CURRENT ALGEBRA, EFFECTIVE
 LAGRANGIANS)
 -TREIMAN-YANG TEST (DECAY, ANGULAR DISTRIBUTION)
 -TRIANGLE GRAPH ('FEYNMAN GRAPH')
 -TRIGGERING ('COINCIDENCE METHOD')
 -TRIPLE-POMERON COUPLING (POMERON, COUPLING)
 *TRIPLET (MODEL, TRIPLET + QUARK)
 TRITIUM
 *TRIUMF CYCL (AT VANCOUVER)
 -TRUSS GRAPH (APPROXIMATION, LADDER)
 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-PARTICLE (EXCHANGE, TWO-PARTICLE)
 *TWO-PHOTON (EXCHANGE, TWO-PHOTON)
 *TWO-PION (EXCHANGE, TWO-PION)

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T

U*U(12) (SYMMETRY, U(12))
 U(2375)
 *U(3) X U(3) (SYMMETRY, U(3) X U(3))
 *U(6) (SYMMETRY, U(6))
 *U(6,6) (SYMMETRY, U(6,6))
 *U-SPIN (QUANTUM NUMBER, U-SPIN)
 -UIR (GROUP THEORY)
 -ULTRAVIOLET DIVERGENCE (RENORMALIZATION)
 -UNIFIED FERMION (MODEL, FERMION)
 *UNIFIED INTERACTION (FIELD THEORY, UNIFIED INTERACTION)
 UNITARITY (RESTRICTED USE)

-UNITARY IRREDUCIBLE REPRESENTATION (GROUP THEORY)
 -UNIVERSAL FERMION INTERACTION (MODEL, WEAK INTERACTION)
 *UNIVERSALITY ('ELECTRON MUON, UNIVERSALITY' OR 'WEAK INTERACTION, UNIVERSALITY' OR 'STRONG INTERACTION, UNIVERSALITY' OR 'ELECTROMAGNETIC INTERACTION, UNIVERSALITY')
 *UR-CITON (MODEL, UR-CITON)
 URANIUM
 *URBARYON (MODEL, URBARYON)

V-V-A THEORY (MODEL, WEAK INTERACTION)
 *V-SPIN (QUANTUM NUMBER, V-SPIN)
 *VACUUM POLARIZATION (FIELD THEORY, VACUUM POLARIZATION)
 -VACUUM STATE ('FIELD THEORY')
 VACUUM TECHNIQUES
 *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 (SEE 'DATA ANALYSIS METHOD' (RESTRICTED USE))
 VANADIUM
 *VARIABLE MASS (MODEL, VARIABLE MASS)
 -VARIABLE-ENERGY CYCLOTRON (CYCLOTRON)
 *VECTOR (RESTRICTED USE)
 -VECTOR BOSON (SEE 'INTERMEDIATE BOSON' OR 'VECTOR MESON')
 -VECTOR CURRENT (SEE '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 DEUTERIUM
 -VECTOR MESON EXCHANGE (EXCHANGE, VECTOR MESON)
 VECTOR MESON INTERMEDIATE BOSON
 VECTOR MESON LIGHT NUCLEUS
 VECTOR MESON NUCLEUS
 VECTOR MESON QUARK
 VECTOR MESON VECTOR MESON
 -VECTOR-AXIAL-VECTOR THEORY (WEAK INTERACTION)
 -VELOCITY SPECTROMETER (TIME-OF-FLIGHT METHOD)
 VENEZIANO MODEL
 VERTEX FUNCTION (RESTRICTED USE, GENERALLY ONLY IN COMBINATIONS WITH PARTICLES)
 VIOLATION
 *VIRASORO (MODEL, VIRASORO)
 -VIRASORO ALGEBRA (MODEL, VIRASORO)
 -VIRTUAL (SEE ANY KIND OF ELECTRON INTERACTIONS)
 -VIRTUAL PHOTOPRODUCTION (USE 'ELECTROPRODUCTION'; ADD ALSO 'PHOTOPRODUCTION' FOR Q-SQUARED --> 0)
 -VON NEUMANN ALGEBRA (GROUP THEORY)
 *VORTEX (SEE 'FIELD THEORY, VORTEX')

W-WALECKA MODEL (NUCLEAR PROPERTIES)
 *WANG (MODEL, WANG)
 -WARD IDENTITY (USE 'QUANTUM ELECTRODYNAMICS, WARD-TAKAHASHI IDENTITY')
 *WARD-TAKAHASHI IDENTITY (QUANTUM ELECTRODYNAMICS, WARD-TAKAHASHI IDENTITY)
 WATER
 -WAVE EQUATION (QUANTUM MECHANICS)
 -WAVE FUNCTION (QUANTUM MECHANICS)
 -WAVE PACKET (QUANTUM MECHANICS)
 *WEAK ABSORPTION (MODEL, WEAK ABSORPTION)
 -WEAK COUPLING (PERTURBATION THEORY)
 WEAK INTERACTION (ALSO: 'MODEL, WEAK INTERACTION')
 *WEINBERG ('MODEL, WEINBERG')
 -WEINBERG THEORY (PERTURBATION THEORY?)
 -WEIZSAECKER-WILLIAMS (APPROXIMATION, EQUIVALENT PHOTON)

-WESS-ZUMINO (FIELD THEORY, SUPERSYMMETRY)
 *WICK-CUTKOSKY (MODEL, WICK-CUTKOSKY)
 *WIDE-ANGLE ('SPECTROMETER, WIDE-ANGLE' OR, E.G., 'PRODUCTION, WIDE-ANGLE')
 *WIDE-GAP (SPARK CHAMBER, WIDE-GAP)
 *WIDTH (USAGE IN ACCORDANCE WITH ROSENFELD TABLES)
 -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)

X(4100)
 XENON
 XI
 XI BARYON RESONANCE
 XI DEUTERIUM
 XI INTERMEDIATE BOSON
 XI LIGHT NUCLEUS
 XI NUCLEUS
 XI QUARK
 XI VECTOR MESON
 XI XI
 XI(1530)
 XI(1820)
 XI(1940)
 XI-

XI- BARYON RESONANCE
 XI- DEUTERIUM
 XI- INTERMEDIATE BOSON
 XI- LIGHT NUCLEUS
 XI- NUCLEUS
 XI- QUARK
 XIO
 XIO BARYON RESONANCE
 XIO DEUTERIUM
 XIO INTERMEDIATE BOSON
 XIO LIGHT NUCLEUS
 XIO NUCLEUS
 XIO QUARK
 XIO XI-
 -XO MESON RESONANCE (ETA'(1958))

X

*YANG (MODEL, YANG)
 -YANG-FELDMAN EQUATIONS (FIELD THEORY)
 *YANG-MILLS (FIELD THEORY, YANG-MILLS)
 *YIELD (IN COMBINATION WITH PARTICLES, ONLY
 WHERE YIELD IS GIVEN WITHOUT CROSS SECTIONS)

YTTERBIUM
 YTTRIUM
 *YUKAWA (POTENTIAL, YUKAWA)

Y

-ZACHARIASEN MODEL (MODEL, FIELD THEORY)
 -ZGS ACCELERATOR (PROTON SYNCHROTRON)
 -ZIMMERMANN MODEL (MODEL, FIELD THEORY)

ZINC
 -ZINN-JUSTIN (MODEL, WEINBERG*)
 ZIRCONIUM

Z

