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The DESY Keyword Thesaurus 1977



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

1. Purpose of Keyword Assignment

Our keywords serve the following purposes:

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

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

The total of 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 Thesaurus ordered by subject (p.3) and ordered alphabetically (p.5).

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

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

3. Two-Particle Combination (Reactions)

Most of the combinations of any two particles (but not all) in the list below 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	ANTILAMBDA
LEPTON	ANTI-K	SIGMA
FERMION	K0	ANTISIGMA
NEUTRINO	K+	SIGMA+
ANTINEUTRINO	K-	SIGMA0
ELECTRON	MESON RESONANCE	SIGMA-
POSITRON	BARYON	XI
MUON	ANTIBARYON	ANTIXI
MUON+	NUCLEON	XIO
MUON-	ANTINUCLEON	XI-
HADRON	ANTI-P	OMEGA-
MESON	P	VECTOR MESON
BOSON	N	BARYON RESONANCE
PI	ANTI-N	DEUTERON
PIO	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 --> K0 K- PI+
P P --> P ANYTHING
DELTA(1236)0 --> 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. 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 (example: FINAL STATE, (NUCLEON 2PI)).

6. Resonances

Meson and baryon resonances are generally named as in the 1976 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, and astrophysics.

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 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 sorting sequence:

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

(+) 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-case headings and terms in parentheses are NOT keywords.
For standardized non-keywords the alphabetical list should be consulted.

PARTICLES	
<u>photon</u>	U(2375)
<u>lepton</u>	K*(892)
<u>neutrino</u>	Q region
neutrino/e/	Q1(1300)
neutrino/mu/	Q2(1400)
neutrino/L/	K(1420)
antineutrino	L(1770)
antineutrino/e/	K*(1780)
antineutrino/mu/	D*
antineutrino/L/	D**
<u>electron</u>	F*
positron	F**
<u>muon</u>	psi mesons
muon+	X(2800)
muon-	J/psi(3100)
<u>antilepton</u>	chi(3410)
<u>heavy lepton</u>	PC(3510)
<u>meson</u>	chi(3550)
<u>pi</u>	psi(3700)
pi+	psi(3950) structure
pi-	psi(4100) structure
pi0	psi(4400)
<u>baryon resonance</u>	
<u>nucleon resonance</u>	
<u>K</u>	N'(1470)
K+	N'(1520)
K-	N'(1535)
KO	N(1670)
KO(L)	N(1688)
KO(S)	N''(1700)
anti-K	N''(1780)
anti-KO	N(1860)
<u>D</u>	N(2190)
D+	N(2220)
DO	N(2650)
<u>F</u>	N(3030)
<u>nucleon</u>	Delta(1236)
p	Delta(1236)+
n	Delta(1236)++
anti-p	Delta(1236)-
anti-n	Delta(1236)--
<u>antinucleon</u>	Delta(1236)0
<u>hyperon</u>	Delta(1650)
<u>Lambda</u>	Delta(1670)
Antilambda	Delta(1890)
<u>Sigma</u>	Delta(1910)
Sigma+	Delta(1950)
Sigma-	Delta(2420)
Sigma0	Delta(2850)
Antisigma	Delta(3230)
<u>Xi</u>	Lambda(1405)
Xi-	Lambda(1520)
Xi0	Lambda(1670)
Antixi	Lambda'(1690)
<u>Omega-</u>	Lambda(1815)
<u>antihyperon</u>	Lambda(1830)
<u>meson resonance</u>	Lambda(2100)
<u>eta(549)</u>	Lambda(2350)
<u>epsilon(700)</u>	Lambda(2585)
<u>rho(765)</u>	Sigma(1385)
rho(765)+	Sigma(1670)
rho(765)-	Sigma'(1750)
rho(765)0	Sigma(1765)
<u>omega(784)</u>	Sigma(1915)
<u>eta'(958)</u>	Sigma''(1940)
<u>deita(970)</u>	Sigma(2030)
<u>S'(1000)</u>	Sigma(2250)
<u>phi(1019)</u>	Sigma(2455)
A1(1070)	Sigma(2620)
B(1235)	Xi(1530)
f(1260)	Xi(1820)
D(1285)	Xi(1940)
A2(1310)	
E(1422)	
f'(1514)	
pi/rho(1540)	
rho'(1600)	
A3(1640)	
omega(1675)	
G(1680)	
rho(1710)	
S(1930)	
H(2050)	
	(other keywords)
	particle
	antiparticle
	vector meson
	scalar meson
	pseudoscalar meson
	intermediate boson
	baryon
	antibaryon
	boson
	fermion
	antifermion
	quark
	hadron
	hadron spectroscopy
	charged particle
	neutral particle
	new particle
	postulated particle
	search for
	mass enhancement
	charmed particle
	charmed hadron
	charmed baryon
	charmed meson
	colored particle
	strange particle
	hyperfragment
	nucleus
	light nucleus
	deuteron
	tritium
	excited nucleus
	nuclide
	atom
	positronium
	ion
	(for two-particle
	combinations, see
	alphabetical list)
	PARTICLE PROPERTIES
	charge
	decay modes
	electric moment
	excited state
	isospin
	lifetime
	magnetic moment
	mass
	mass difference
	parity
	quantum number
	spin
	helicity
	polarization
	strangeness
	INTERACTIONS
	gravitation
	weak interaction
	neutral current
	electromagnetic interaction
	bremsstrahlung
	Compton scattering
	electroproduction
	hyperfine structure
	ionization
	multiple scattering
	pair
	photoproduction
	radiative correction
	strong interaction
	charge exchange
	(other keywords)
	absorption
	angular correlation
	angular distribution
	angular momentum
	backscatter
	binding energy
	capture
	channel cross section
	coupling
	cross section
	decay
	differential cross section
	diffraction
	diffusion
	elastic scattering
	emission
	energy dependence
	energy levels
	energy loss
	energy spectrum
	exchange
	final state
	form factor
	high energy behavior
	inclusive reaction
	interference
	kinematics
	longitudinal momentum
	mass spectrum
	momentum spectrum
	momentum transfer
	multiple production
	multiplicity
	radiation
	recoil
	scattering
	secondary radiation
	showers
	threshold
	total cross section
	transverse momentum
	INSTRUMENTS AND METHODS
	(track measuring)
	bubble chamber
	bubble chamber (hydrogen)
	bubble chamber (deuteron)
	bubble chamber (heavy liquid)
	cloud chamber
	drift 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
	hodoscope
	ionization chamber
	liquid argon detector
	magnetic detector
	magnetic spectrometer
	particle identification
	proportional counter
	scintillation counter
	semiconductor detector
	shower detector
	solid-state counter
	spectrometer
	total-absorption counter
	(electronics and computers)
	analog circuit
	analog logic
	analog-to-digital converter
	digital logic
	fast logic
	preprocessing
	microprocessor
	CAMAC system
	interface
	programming
	computer
	(data analysis)
	data analysis method
	amplitude analysis
	multidimensional analysis
	statistical analysis
	partial-wave analysis
	track data analysis
	accelerator
	cyclotron
	synchro-cyclotron
	betatron
	synchrotron
	proton synchrotron
	electron synchrotron
	linear accelerator
	storage ring
	(internal and external beams)
	aberration
	beam
	beam damping
	beam dynamics

beam emittance	potential scattering	MATERIALS
beam focusing	S-matrix	alloy
beam instability	scattering amplitude	ceramics
beam loading	scattering length	chemicals
beam monitoring	selection rule	compounds
beam optics	spinor	concrete
beam oscillation	sum rule	crystal
betatron oscillation	vertex function	gas
synchrotron oscillation	violation	glass
beam transport	NUCLEAR PHYSICS	inorganic compounds
bending magnet	nuclear physics	liquid
bunching	charge distribution	metal
colliding beams	fission	mineral
ejection	fusion	organic compounds
injection	nuclear properties	plastics
luminosity	nuclear model	rubber
particle separator	nuclear force	semiconductor
particle source	nuclear reaction	solids
pulsed magnet	photofission	steel
quadrupole lens	electrofission	water
RF system	radioactivity	
target		
<u>(other keywords)</u>		
alignment	GENERAL PHYSICS	MODAL KEYWORDS
background	astrophysics	activity report
calibration	atomic physics	bibliography
coil	correction	book
feedback	correlation	conference
health physics	cosmic radiation	data compilation
dosimetry	current	lectures
magnet	density	manual
measurement	dependence	proposed experiment
monitoring	effect	review
orbit	electric field	tables
power supply	electricity	thesis
secondary radiation	electromagnetic field	1977
shielding	elements	
	energy	
	flux	
	fundamental constant	
	forces	
	magnetic field	
	matter	
	antimatter	
	mechanics	
	moment	
	momentum	
	nonrelativistic	
	optics	
	plasma	
	potential	
	quantum mechanics	
	relativity theory	
	resonance	
	spectra	
	superconducting	
	temperature	
	thermodynamics	
	transmission	
	OTHER FIELDS	
	<u>mathematics</u>	
	algebra	
	functional analysis	
	group theory	
	mathematical methods	
	numerical mathematics	
	statistics	
	transformation	
	<u>chemistry</u>	
	(all elements)	
	<u>molecular biology</u>	
	<u>engineering</u>	
	buildings	
	communications	
	control system	
	electrical engineering	
	heat engineering	
	low temperature	
	mechanical engineering	
	microwaves	
	nuclear engineering	
	power engineering	
	safety	
	vacuum system	
	<u>nuclear medicine</u>	
<u>(other keywords)</u>		
approximation		
conservation law		
coupling constant		
invariance		
leptoproduction		
many-body problem		
three-body problem		
partial wave		

ALPHABETICAL KEYWORD LIST

A

*ABC (ENHANCEMENT, ABC)	ANTI-KO NUCLEUS
-ABELIAN FIELD THEORY (USE 'FIELD THEORY')	ANTI-KO P
ABERRATION	ANTI-KO QUARK
*ABFST (MODEL, ABFST)	ANTI-KO VECTOR MESON
ABSORPTION	ANTI-N
-ABSORPTIVE CORRECTION ('CORRECTION, ABSORPTION'; USED ONLY FOR EXPERIMENTAL CORRECTION)	ANTI-N BARYON RESONANCE
-ABSORPTIVE MODEL (MODEL, ABSORPTION)	ANTI-N DEUTERON
*ABSORPTIVE PERIPHERAL (MODEL, ABSORPTIVE PERIPHERAL)	ANTI-N HYPERON
-ABSTRACT ONLY (NOT USED AS A KEYWORD. APPEARS BEHIND THE TITLE)	ANTI-N INTERMEDIATE BOSON
ACCELERATOR	ANTI-N LAMBDA
*ACCEPTANCE ('COUNTERS AND DETECTORS, ACCEPTANCE' OR 'ACCELERATOR, ACCEPTANCE')	ANTI-N LIGHT NUCLEUS
*ACOUSTIC (SPARK CHAMBER, ACCUSTIC)	ANTI-N NUCLEUS
ACTINIUM	ANTI-N OMEGA-
-ACTION PRINCIPLE (SEE 'FIELD THEORY')	ANTI-N QUARK
-ACTION-AT-A-DISTANCE (AXIOMATIC FIELD THEORY)	ANTI-N SIGMA
ACTIVITY REPORT	ANTI-N SIGMA+
-ACC (ANALOG-TO-DIGITAL CONVERTER)	ANTI-N SIGMA-
-ADEMULLI-GATTO THEOREM (SYMMETRY BREAKING)	ANTI-N SIGMAO
*ADLER (SUM RULE, ADLER)	ANTI-N VECTOR MESON
-ADLER CONDITION ('MODEL, PCAC' AND 'CURRENT ALGEBRA')	ANTI-N XI
-ADLER-BELL-GROSS-JACKIW (CURRENT ALGEBRA)	ANTI-N XI-
*ADLER-DASHEN-HELLWIG-FUBINI (SUM RULE, ADLER-DASHEN-HELLWIG-FUBINI)	ANTI-N XIO
-ADLER-WEISBERGER RELATION ('MODEL, PCAC' AND 'CURRENT ALGEBRA')	ANTI-P
*ADMIXTURE	*ANTI-P ATOM
*AEROGEL (CHERENKOV COUNTER, AEROGEL)	ANTI-P BARYON RESONANCE
-AGS ACCELERATOR ('PROTON SYNCHROTRON'; FOR EXPERIMENTAL RESULTS USE 'BRUKHAVEN PS')	ANTI-P DEUTERON
*AIR (SHOWERS, AIR)	ANTI-P HYPERON
ALGEBRA (SEE ALSO 'ALGEBRA, C*' OR 'ALGEBRA, VON NEUMANN' OR 'ALGEBRA, CLIFFORD' OR 'ALGEBRA, WEYL' OR 'ALGEBRA, LIE' OR 'ALGEBRA, GRASSMANN')	ANTI-P INTERMEDIATE BOSON
ALIGNMENT (SEE ALSO 'POLARIZATION')	ANTI-P LAMBDA
ALLOY	ANTI-P LIGHT NUCLEUS
-ALPHA MODEL (NUCLEAR MODEL)	ANTI-P N
-ALPHA PARTICLE (HELlUM)	-ANTI-P NUCLEON (NUCLEON ANTI-P)
ALUMINUM	ANTI-P NUCLEUS
*AMATI-FUBINI-STANGHELLINI ('MODEL, AMATI-FUBINI-STANGHELLINI' AND 'MODEL, MULTIPERIPHERAL')	ANTI-P OMEGA-
AMERICIUM	ANTI-P P
*AMPLIFIER (SEE ALSO 'ANALOG CIRCUIT'. USED ONLY IN CONNECTION WITH CHAMBERS)	ANTI-P QUARK
AMPLITUDE ANALYSIS ('INTERPRETATION OF EXPERIMENTS, AMPLITUDE ANALYSIS', 'SPIN, AMPLITUDE ANALYSIS')	ANTI-P SIGMA
ANALOG CIRCUIT (SEE ALSO 'ANALOG LOGIC')	ANTI-P SIGMA+
ANALOG LOGIC (SEE ALSO 'ANALOG CIRCUIT')	ANTI-P SIGMA-
-ANALOG MODEL	ANTI-P SIGMAO
ANALOG-TO-DIGITAL CONVERTER	ANTI-P VECTOR MESON
ANALYTIC PROPERTIES (RESTRICTED USE; NOT FOR REGGE POLOLOGY, STRUCTURE FUNCTIONS AND GENERALLY IN CONNECTION WITH OTHER KEYWORDS, THE ANALYTIC PROPERTIES OF WHICH ARE INVESTIGATED)	ANTI-P XI
-ANALYTICITY (ANALYTIC PROPERTIES)	ANTI-P XI-
ANGULAR CORRELATION	ANTI-P XIO
ANGULAR DEPENDENCE	ANTIBARYON
ANGULAR DISTRIBUTION	ANTIBARYON BARYON RESONANCE
ANGULAR MOMENTUM	ANTIBARYON DEUTERON
-ANHARMONIC OSCILLATOR (MODEL, OSCILLATOR)	ANTIBARYON HYPERON
ANISOTROPY (USED ONLY IN COSMIC-RADIATION PROBLEMS)	ANTIBARYON INTERMEDIATE BOSON
*ANNIHILATION	ANTIBARYON LAMBDA
*ANOMALY	ANTIBARYON LIGHT NUCLEUS
ANTI-K	ANTIBARYON N
ANTI-K BARYON	ANTIBARYON NUCLEON
ANTI-K DEUTERON	ANTIBARYON OMEGA-
-ANTI-K K (K ANTI-K; SEE ALSO 'ANTI-KO K')	ANTIBARYON P
ANTI-K LIGHT NUCLEUS	ANTIBARYON QUARK
ANTI-K N	ANTIBARYON SIGMA
ANTI-K NUCLEON	ANTIBARYON SIGMA+
ANTI-K NUCLEUS	ANTIBARYON SIGMA-
ANTI-K P	ANTIBARYON SIGMAO
ANTI-KO	ANTIBARYON VECTOR MESON
ANTI-KO BARYON	ANTIBARYON XI
ANTI-KO BARYON RESONANCE	ANTIBARYON XI-
ANTI-KO DEUTERON	ANTIBARYON XIO
ANTI-KO INTERMEDIATE BOSON	-ANTIEUTERON (DEUTERON, ANTIPARTICLE)
ANTI-KO K+	ANTIFERMION
ANTI-KO K-	ANTIFERMION FERMION
ANTI-KO KO	-ANTIHADRON (HADRON, ANTIPARTICLE)
ANTI-KO LAMBDA	ANTIHYPERON
ANTI-KO LIGHT NUCLEUS	ANTIHYPERON BARYON RESONANCE
ANTI-KO MESON RESONANCE	ANTIHYPERON DEUTERON
ANTI-KO N	ANTIHYPERON INTERMEDIATE BOSON
ANTI-KO NUCLEON	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
	-ANTILEPTON LEPTON (SEE 'LEPTON 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 KO
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 PIO
ANTINEUTRINO POSITRON
ANTINEUTRINO QUARK
ANTINEUTRINO SIGMA
ANTINEUTRINO SIGMA+
ANTINEUTRINO SIGMA-
ANTINEUTRINO SIGMAO
ANTINEUTRINO VECTOR MESON
ANTINEUTRINO XI
ANTINEUTRINO XI-
ANTINEUTRINO XIO
ANTINEUTRINO/E/
ANTINEUTRINO/L/ (HEAVY LEPTON ANTINEUTRINO)
ANTINEUTRINO/MU/
-ANTINEUTRINOPRODUCTION (NEUTRINOPRODUCTION)
-ANTINEUTRON (ANTI-N)
ANTINUCLEON BARYON RESONANCE
ANTINUCLEON DEUTERON
ANTINUCLEON HYPERON
ANTINUCLEON INTERMEDIATE BOSON
ANTINUCLEON LAMBDA
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
ANTIMEGA-
ANTIPARTICLE
-ANTIPARTICLE PARTICLE (USE 'PARTICLE
ANTIPARTICLE')

-ANTIQUARK ('QUARK, ANTI PARTICLE'. SEE ALSO
'QUARK ANTIQUARK')
ANTISIGMA
ANTISIGMA BARYON RESONANCE
ANTISIGMA DEUTERON
ANTISIGMA INTERMEDIATE BOSON
ANTISIGMA LIGHT NUCLEUS
ANTISIGMA NUCLEUS
ANTISIGMA QUARK
ANTISIGMA+
ANTISIGMA-
ANTISIGMAO
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)
*ANYTHINGO (ONLY IN REACTIONS)
APPROXIMATION
-ARGAND PLOT (USE 'PARTIAL-WAVE ANALYSIS')
ARGON
*ARGONNE PS (ONLY FOR EXPERIMENTAL RESULTS
GAINED THERE)
-ARRAY (SEE 'HODOSCOPE' OR 'PROGRAMMING')
ARSENIC
*ASSOCIATED PRODUCTION
ASTATINE
ASTROPHYSICS
*ASYMMETRY
-ASYMPTOTIC BEHAVIOR (GENERALLY '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 LIKE 'REGGE POLES' OR 'FACTORIZATION'.
FOR ASYMPTOTIC BEHAVIOR AT LOW ENERGIES SEE
'INFRARED PROBLEM')
*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 (IF ELECTRONICS, GENERALLY
'DIGITAL LOGIC'. IF NOT ELECTRONICS, 'ELECTRICAL
ENGINEERING')
*AXIAL
*AXIAL-VECTOR (CURRENT, AXIAL-VECTOR)
*AXIAL-VECTOR MESON
*AXIAL-VECTOR MESON DOMINANCE (MODEL, AXIAL-
VECTOR MESON DOMINANCE)
AXIOMATIC FIELD THEORY
A1{1070}
-A2 EXCHANGE (EXCHANGE, A2{1310})
-A2 SPLITTING (A2{1310}, MASS DIFFERENCE)
A2{1310}
A3{1640}

B1235
BACKGROUND
-BACKGROUND RADIATION (RADIATION, BACKGROUND)
BACKSCATTER
-BACKWARD SCATTERING (BACKSCATTER)
*BAG (MODEL, BAG)
*BALI-CHEW-PIGNOTTI (MODEL, BALI-CHEW-PIGNOTTI)
-BAVACH SPACE (USE 'LINEAR SPACES')
*BARDAKCI-RUEGG (MODEL, BARDAKCI-RUEGG)
*BARDAKCI-RUEGG-VIRASORO (MODEL, BARDAKCI-RUEGG-VIRASORO)
BARIUM
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 DEUTERON
-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 (CONSERVATION LAW, BARYON)
BARYON OMEGA-
BARYON P
-BARYON PIPE MODEL (EXCHANGE, BARYON)
BARYON QUARK
BARYON RESONANCE
-BARYON RESONANCE BARYON RESONANCE (BARYON RESONANCE, BARYON BARYON)
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
-BARYONIC NUMBER (USUALLY 'CONSERVATION LAW, BARYON'; SEE ALSO 'QUANTUM NUMBER, BARYON')
*BATAVIA PS (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
BEAM
-BEAM CALIBRATION (BEAM MONITORING)
-BEAM CHOPPER (SEE 'BUNCHING')
-BEAM COOLING (USE 'BEAM DAMPING')
BEAM DAMPING
*BEAM DUMPING (STORAGE RING, BEAM DUMPING)
BEAM DYNAMICS
BEAM EMMITTANCE
BEAM FOCUSING
BEAM INSTABILITY
-BEAM LINES (SEE 'BEAM TRANSPORT')
BEAM LOADING
BEAM MONITORING
BEAM OPTICS
BEAM OSCILLATION
-BEAM POLARIZATION (USE 'BEAM, POLARIZATION' FOR MEASUREMENT OF POLARIZATION DEGREE. SEE ALSO 'POLARIZED BEAM')
-BEAM SEPARATOR (USE 'PARTICLE SEPARATOR')
-BEAM STOP (SEE 'BEAM DUMPING')
BEAM TRANSPORT
*BEAM-BEAM (SCATTERING, BEAM-BEAM)
*BELL-STEINBERGER (MODEL, BELL-STEINBERGER)
BENDING MAGNET
*BERKELEY CYCL (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
*BERKELEY PS (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
BERKELIUM
-BERMAN-BJORKEN-KUGUT MODEL (TRANSVERSE MOMENTUM, HIGH)
BERYLLOM
-BETA DECAY (SEMLEPTONIC 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
-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-KUGUT MODEL (USE 'INCLUSIVE REACTION, EXCLUSIVE REACTION')
-BJORKEN-PASCHOS (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')
*BLOWUP (BEAM, BLOWUP)
-BLUMELEIN LINE (SEE 'POWER SUPPLY' AND 'STREAMER CHAMBER')
*BONN ES (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
BOOK
*BOOSTER
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 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
-BOUNDED ELECTRONS (ATOMIC PHYSICS)
*BOUNDED STATE ('MODEL' IS OMITTED)
*BOUNDARY CONDITION (MODEL, BOUNDARY CONDITIONS)
-BOX DIAGRAM (SEE 'FEYNMAN GRAPH' (RESTRICTED USE))
-BPHZ (RENORMALIZATION, REGULARIZATION)
*BRANCH HIGHWAY (CAMAC SYSTEM, BRANCH HIGHWAYS)
*BRANCHING RATIO (VERY RESTRICTED USE: ONLY IN CASE OF MEASURED OR CALCULATED NUMERICAL VALUE)

B
-BRANS-DICKE (GRAVITATION)
*BREAKUP ('FISSION, BREAKUP' CR, E.G.,
 'P, BREAKUP')
*BREIT-WIGNER (MODEL, BREIT-WIGNER)
BREMSSTRAHLUNG (ALSO 'MODEL, BREMSSTRAHLUNG')
-BRJKEN SYMMETRY (SYMMETRY BREAKING)
BROMINE
*BROOKHAVEN LINAC (ONLY FOR EXPERIMENTAL RESULTS
 GAINED THERE)
*BROOKHAVEN PS (ONLY FOR EXPERIMENTAL RESULTS
 GAINED THERE)

BUBBLE CHAMBER
BUBBLE CHAMBER(DEUTERON)
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 'MODEL,
 N-PJNT 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 (RENORMALIZATION 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 (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 CAMAC SYSTEM
 *CAMBRIDGE ES (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 *CANESCHI-PIGNOTTI (MODEL, CANESCHI-PIGNOTTI)
 CAPTURE
 CARBON
 *CARLITZ-KISLINGER (MODEL, CARLITZ-KISLINGER)
 *CASCADE ('MODEL, CASCADE' OR 'DECAY, CASCADE' JR 'NUCLEUS, CASCADE'; NOT USED FOR SHOWERS)
 -CASCADE EVAPORATION MODEL (MODEL, CASCADE)
 -CASIMIR OPERATOR (USE 'GROUP THEORY')
 -CASTILLEJO-DALITZ-DYSON POLES (PARTIAL WAVE, DISPERSION RELATIONS)
 *CAUSALITY (SEE 'FIELD THEORY, CAUSALITY', 'QUANTUM MECHANICS, CAUSALITY' OR 'DISPERSION RELATIONS, CAUSALITY')
 -CAVITY (SEE 'RF SYSTEM')
 -CC (SEE 'CAMAC SYSTEM, CONTROLLER')
 -COO POLES (PARTIAL WAVE, DISPERSION RELATIONS)
 *CELLU (PRIPJASE FJF PETRA; 'MAGNETIC DETECTOR, CELLU')
 *CENTRAL REGION (USE 'INCLUSIVE REACTION, CENTRAL REGION')
 CERAMICS
 CERIUM
 *CERN CYCL (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 *CERN SPS (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 *CERN STOR (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 *CERN1 PS (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 *CERN2 PS (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 -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 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 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 (CURRENT, CHARM CHANGING)
 CHARMED BARYON

CHARMED HADRON
 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)
 CHI(3410)
 *CHI(3450) (NEW PARTICLE, CHI(3450))
 -CHI(3510) (USE 'PC(3510)')
 CHI(3550)
 *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)
 *CLEBSCH-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-TANNOUDJI-HENYEE-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-PI-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')
 -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)
 COMPOUNDS
 COMPTON SCATTERING
 COMPUTER

C 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)
-COISPIRACY (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 'DOSSIMETRY' 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 (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
CORRECTION
CORRELATION
COSMIC RADIATION
-COSMOLOGY (SEE 'ASTROPHYSICS')
*COTS
-COTTINGHAM FORMULA (MASS DIFFERENCE)
*COULOMB
-COULOMB DISSOCIATION (NUCLEAR REACTION, COULOMB SCATTERING)

*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 SCINTILLATOR (USE 'SCINTILLATION COUNTER, CRYSTAL')
CURIUM
CURRENT (RESTRICTED USE)
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-ZACHARIASEN (MODEL, CUTKOSKY-ZACHARIASEN)
-CVC (MODEL, CONSERVED VECTOR CURRENT)
CYCLOTRON

D
 D(1285)
 D+
 D*
 D**
 *D/F RATIO (COUPLING CONSTANT, D/F RATIO)
 -DAC
 *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-GELL-MANN (SEE 'SUM RULE', ADLER-DASHEN-GELL-MANN-FUBINI)
 *DASP (AT DORIS; 'MAGNETIC DETECTOR, DASP')
 -DATA ANALYSIS (SEE 'STATISTICAL ANALYSIS' OR 'MULTIDIMENSIONAL ANALYSIS' OR 'PARTIAL-WAVE ANALYSIS' OR 'DATA COMPIRATION' OR 'DATA ANALYSIS METHOD')
 DATA ANALYSIS METHOD (RESTRICTED USE)
 -DATA COLLECTION (SEE 'DATA COMPIRATION')
 DATA COMPIRATION
 -DATA HANDLING (SEE 'COMPUTER')
 -DATA PRESENTATION (SEE 'INTERPRETATION OF EXPERIMENTS' OR 'DATA ANALYSIS METHOD')
 -DATA PROCESSING (SEE 'COMPUTER')
 *DE SITTER ('GROUP THEORY, DE SITTER' OR 'ALGEBRA, DE SITTER')
 DECAY
 -DECAY CROSS SECTION (DECAY)
 DECAY MODES (RESTRICTED TO CASES WHERE NUMERICAL VALUES ARE GIVEN, OTHERWISE USE 'DECAY')
 -DECAY RATES (USE 'DECAY MODES')
 -DECAY WIDTH ('PARTICLE, WIDTH' AND PROBABLY 'PARTICLE, BRANCHING RATIO')
 *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 I=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(962) (DELT(970))
 DELTA(970)
 DENSITY
 *DENSITY MATRIX (GENERALLY 'SPIN, DENSITY MATRIX')
 -DENSITY MODEL (MODEL, DUAL RESONANCE)
 DEPENDENCE (RESTRICTED USE)
 *DEPOLARIZATION (POLARIZATION, DEPOLARIZATION)
 -DESER-GILBERT-SUDARSHAN (SEE 'SPECTRAL REPRESENTATION')
 *DESY ES (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 *DESY STJR (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 -DETECTION ('COUNTERS AND DETECTORS' OR 'MEASUREMENT' OR 'PARTICLE IDENTIFICATION')
 -DETECTOR (USE MORE SPECIFIC KEYWORDS)
 -DEUTERIUM (USE 'DEUTERON')
 DEUTERON (ALSO USED FOR DEUTERIUM NUCLEUS)
 DEUTERON DEUTERON
 DEUTERON INTERMEDIATE BOSON
 DEUTERON LIGHT NUCLEUS
 -DEUTERON MODEL (MODEL, DEUTERON)
 DEUTERON NUCLEUS
 DEUTERON QUARK
 -DIAGONALIZATION
 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)
 -DIFFRACTION SCATTERING MODEL ('MODEL, DIFFRACTION' OR 'EXPERIMENTAL, 'INTERPRETATION OF EXPERIMENTS, 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, DILATATION')
 *DILATION (SYMMETRY, DILATION)
 -DILATION (USE 'SYMMETRY, DILATION')
 *DILEPTON (FINAL STATE, DILEPTON)
 -DIMENSIONAL ANALYSIS (IN THEORY: SEE 'HIGH ENERGY BEHAVIOR')
 *DIMUON (FINAL STATE, DIMUON)
 *DIP (DIFFERENTIAL CROSS SECTION, DIP)
 -DIP MECHANISM (NOT USED)
 *DIPION
 -DIPOLAR (SEE 'FORM FACTOR')
 -DIPOLE MAGNET (SEE 'BENDING MAGNET')
 *DIQUARK (USED SINGLY)
 *DIRAC (FIELD EQUATIONS, DIRAC)
 -DIRAC PARTICLE ('FERMION', SEE ALSO 'FIELD EQUATIONS' OR 'ELECTROMAGNETIC, RADIATION')
 *DIRECT PRODUCTION
 -DIRECT REACTION (SEE 'NUCLEAR REACTION')
 -DISCHARGE CHAMBER (SPARK CHAMBER)
 -DISCRIMINATOR (ANALOG-TU-DIGITAL CONVERTER)
 *DISPERSION
 DISPERSION RELATIONS
 -DISPERSION THEORY (DISPERSION RELATIONS)
 -DISPLAY (FREQUENTLY: PULSE-HEIGHT ANALYZER)
 *DISSOCIATION (DIFFRACTION, DISSOCIATION)
 *DISTORTED WAVE BORN (APPRXIMATION, DISTORTED WAVE BORN)
 *DISTORTED WAVE IMPULSE (APPRXIMATION, DISTORTED WAVE IMPULSE)
 -DISTRIBUTION (IN EXPERIMENTAL PAPERS SEE 'SPECTRAL' OR 'ANGULAR DISTRIBUTION' OR 'ENERGY SPECTRUM' OR 'MASS SPECTRUM')
 -DISTRIBUTION FUNCTION (NOT USED)
 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 'RADIATIVE CORRECTION' 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')
 -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 (SEE 'FIELD THEORY, PROPAGATOR' AND 'RENORMALIZATION')
 DRIFT CHAMBER
 *DROPLET (MODEL, DROPLET)
 -DUAL ABSORPTIVE MODEL (MODEL, ABSORPTION)
 -DUAL AMPLITUDE WITH MANDELSTAM ANALYTICITY ('MODEL, DUAL RESONANCE' AND 'ANALYTIC PROPERTIES')

D -DUAL DIFFRACTION ('DIFFRACTION' AND 'DUALITY')
-DUAL FIELD THEORY (SEE ALSO 'FIELD THEORY,
 DUALITY')
-*DUAL RESONANCE (MODEL, DUAL RESONANCE)
-DUAL-LOOP MODEL (DUAL FIELD THEORY,
 HIGHER-ORDER)
-DUALITY (USUALLY WITHOUT 'REGGE POLES')
-*DUBNA CYCL (ONLY FOR EXPERIMENTAL RESULTS
 GAINED THERE)
-*DUBNA PS (ONLY FOR EXPERIMENTAL RESULTS GAINED
 THERE)

*DUERR-PILKUHN (MODEL, DUERR-PILKUHN)
-DUFFIN-KEMMER (FIELD EQUATIONS)
-DUFFIN-KEMMER-PETIAU (FIELD EQUATIONS)
-CWBA (APPROXIMATION, DISTORTED WAVE BORN)
-DYNAMIC GROUP (GROUP THEORY)
-DYNAMICAL (NOT USED)
-DYNAMICS (NOT USED)
-DYSON REPRESENTATION (SPECTRAL REPRESENTATION)
DYSPROSIUM
DO

E114221
 -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)
 -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
 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 (USE ALSO WHEN CHARGE IS IRRELEVANT)
 ELECTRON ANTI-K0
 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 COOLING (SEE 'BEAM DAMPING')
 ELECTRON DEUTERON
 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 (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 PIO
 ELECTRON POSITRON
 ELECTRON QUARK
 *ELECTRON RING ('ACCELERATOR, ELECTRON RING' (NOT COUPLED WITH 'ION' OR 'HEAVY ION'))
 ELECTRON SIGMA
 ELECTRON SIGMA+
 ELECTRON SIGMA-

ELECTRON SIGMAO
 -ELECTRON SPECTROMETER (SEE 'MAGNETIC SPECTROMETER')
 ELECTRON SYNCHROTRON
 ELECTRON VECTOR MESON
 ELECTRON XI
 ELECTRON XII
 ELECTRON XIO
 -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-MANGE RELATION (ENERGY LOSS)
 *ENHANCEMENT ('TOTAL CROSS SECTION, ENHANCEMENT', 'DIFFERENTIAL CROSS SECTION, ENHANCEMENT', 'CROSS SECTION, ENHANCEMENT')
 EPSILON(700)
 -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 (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 *ERICSON FLUCTUATIONS (STATISTICS, ERICSON FLUCTUATIONS)
 -ETA(ETA) 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(700))
 ETA(958)
 EUROPUM
 -EVAPORATION MODEL (MULTIPLE PRODUCTION)
 -EVENT SELECTOR (SEE 'MICROPROCESSOR, PREPROCESSING')
 EXCHANGE
 *EXCHANGE DEGENERACY (USED IN CONNECTION WITH REGGE POLOLOGY)
 -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
 *F MESON DOMINANCE (MODEL, F MESON DOMINANCE)
 F(1260)
 F*
 F**
 -F/D RATIO (COUPLING CONSTANT, D/F RATIO)
 F'(1514)
 -FABBRI PLOT (KINETICS)
 *FACTORIZATION
 -FADEEV 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 (ALSO 'MODEL, FERMION' AND 'STATISTICS' FOR FERMION MODEL)
 FERMION ANTI-K
 FERMION ANTI-KO
 FERMION ANTI-N
 FERMION ANTI-P
 FERMION ANTIBARYON
 -FERMION ANTIFERMION (SEE 'ANTIFERMION FERMION')
 FERMION ANTIHYPERON
 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 KO
 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
 FERMUM
 -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 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-KISSINGER-RAVDAL MODEL (QUARK)
 -FFAG ('SYNCHROTRON' OR 'CYCLOTRON')
 *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 EQUATIONS')
 *FIXED POLE (MODEL, FIXED POLE)
 *FIXED-ANGLE
 -FIXED-T DISPERSION RELATIONS (DISPERSION RELATIONS)
 *FLASH TUBE (SPARK CHAMBER, FLASH TUBE)
 *FLAVOR (QUARK, FLAVOR)
 *FLUID (ONLY USE FOR 'MODEL, FLUID'. OTHERWISE USE 'LIQUID')
 -FLUID ANALOGY (USE 'MODEL, FLUID')
 FLUORINE
 FLUX
 -FNAL ('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' OR '..., WIDE-ANGLE')
 -FORWARD-BACKWARD SYMMETRY (USE 'ANGULAR DISTRIBUTION')
 *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')
 FRANCIM
 *FRASCATI ES (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 *FRASCATI STUR (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 -FREDHOLM OPERATOR (NOT USED)
 *FREON
 -FREQUENCY GENERATION (SEE 'MICROWAVES')
 -FREQUENCY MEASUREMENT (SEE 'MICROWAVES')
 *FRIEDMAN (MODEL, FRIEDMAN)
 -FRITZSCH-HELL-MANN (LIGHT CONE BEHAVIOR)
 *FROISSART BOUND (HIGH ENERGY BEHAVIOR, FROISSART BOUND)
 *FROISSART-GRIBOV (PARTIAL WAVE, FROISSART-GRIBOV)
 *FUBINI-FURLAN (MODEL, FUBINI-FURLAN)
 FUNCTIONAL ANALYSIS
 FUNDAMENTAL CONSTANT
 -FUNDAMENTAL LENGTH (FUNDAMENTAL CONSTANT, LENGTH)
 FUSION
 -FI MESON RESONANCE (PI/RHO(1540))
 -F1(1540) (PI/RHO(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 (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
GEIGER-MUELLER COUNTER
*GELL-MANN-LOW (RENORMALIZATION GROUP, GELL-MANN-LOW)
*GELL-MANN-JAKES-RENNER ('MODEL, GELL-MANN-OAKES-RENNER')
*GELL-MANN-OKUBO ('MODEL, GELL-MANN-OKUBO' OR 'MASS FORMULA, GELL-MANN-OKUBO')
-GELL-MANN-SHARP-WAGNER (COUPLING, PI-RHO(765)-OMEGA(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)
*GLASGOW LINAC (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
*GLASHOW-ILIOPOULOS-MAIANI (MODEL, GLASHOW-ILIOPOULOS-MAIANI)
GLASS
*GLAUBER (MODEL, GLAUBER)
-GLAUBER-MARGULIS MODEL (MODEL, GLAUBER)
*GLUON (MODEL, GLUON)
GOLD
-GOELBERGER-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)
*GRAVITON (POSTULATED PARTICLE, GRAVITON)
-GREEN FUNCTION
*GRIBOV (MODEL, GRIBOV)
-GRIBOV-POMERANCHUK (PARTIAL WAVE, ANALYTIC PROPERTIES)
GROUP THEORY
-GUPTA-BLEULER (QUANTUM ELECTRODYNAMICS)

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 ANTIXI
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 MJDEL (MODEL, HADREN)
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 ATOM
*HADRONIC COMPONENT ('COSMIC RADIATION,
HADRONIC COMPONENT')
-HADRONIC DECAY (SEE 'NONLEPTONIC DECAY')
HAFNIUM
-HAEGEDEK MJDEL (MJDEL, THERMODYNAMICAL)
-HAEGEDEK-FRAUTSCHI (SEE 'BOOTSTRAP')
*HAN-NAMBU (USE 'QUARK, HAN-NAMBU')
*HARARI (MJDEL, HARARI)
-HARARI-FREUND MODEL (SEE 'DUALITY')
-HARARI-JSNER MODEL (SEE 'DUALITY')
*HARD CORE (MODEL, HARD CORE)
-HARD MESON (CURRENT ALGEBRA, EFFECTIVE
LAGRANGIANS)
-HARD PHOTON (RADIATIVE CORRECTION)
-HARD PION (CURRENT ALGEBRA, EFFECTIVE
LAGRANGIANS)
-HARD SCATTERING (SEE 'MODEL, PARTON' JR
'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
'DOSIMETRY')
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')
-HEAVY WATER (DEUTERON, WATER)
*HEISENBERG (FIELD THEORY, HEISENBERG)
HELICITY
HELIUM
-HIDDEN VARIABLES (QUANTUM MECHANICS)
*HIGGS (MODEL, HIGGS)
-HIGGS-KIBBLE (FIELD THEORETICAL 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.)
-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 (NOT USED)
HODOSCOPE
-HODOSCOPE 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

*IZUKA-JKUBO-ZWEIG (SELECTION RULE,
IZUKA=JKUBO=ZWEIG)
*IMAGE INTENSIFIER
*IMPACT PARAMETER (MODEL, IMPACT PARAMETER)
*IMPULSE (APPROXIMATION, IMPULSE)
-IMPURITY (SEE 'ADMIXTURE')
INCLUSIVE REACTION
*INCOHERENT INTERACTION
*INCOHERENT PRODUCTION
*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-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')
*INSTANTON (FIELD THEORY, INSTANTON)
-INTEGRAL REPRESENTATION (USE 'SPECTRAL REPRESENTATION')
-INTENSITY (SEE 'YIELD' OR 'FLUX')
*INTERACTION
INTERFACE (ALSO 'DIGITAL LOGIC, INTERFACE' OR 'ANALOG LOGIC, INTERFACE' OR 'COMPUTER, INTERFACE' OR 'INTERFACE, EXPERIMENTAL EQUIPMENT')
INTERFERENCE
INTERMEDIATE BOSON (ALSO 'MODEL, INTERMEDIATE BOSON')
-INTERMEDIATE NUCLEUS (USE 'EXCITED NUCLEUS')

-INTERMEDIATE STATE (SEE 'EXCHANGE' OR 'FINAL STATE' OR 'DECAY, CASCADE')
*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)
INVARIANCE
-INVARIANT PHASE SPACE (MODEL, STATISTICAL)
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')
*ISOCRONOUS (CYCLOTRON, ISOCRONOUS)
*ISOSCALAR
ISOSPIN
-ISOTOPE (NUCLIDE)
*ISOVECTOR
-ISR ('STORAGE RING, P P'; FOR EXPERIMENTAL RESULTS USE 'CERN STOK')
J

-J(310C) (USE 'J/PSI(3100)')
J/PSI(3100)
-JACOB-SLANSKY (MODEL, MULTIPLE PRODUCTION)
*JADE (PROPOSED FOR PETRA; 'MAGNETIC DETECTOR, JADE')
*JET (MODEL, 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')
J

K K
K ANTI-K
K ANTI-KO
K ANTI-N
K ANTI-P
K ANTIBARYON
K ANTILAMBDA
K ANTINUCLEON
K ANTISIGMA
K BARYON
K BARYON RESONANCE
K DEUTERON
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(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+ DEUTERON
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*(092))
K*(1780)
K*(892)
K-
K- ANTI-N
K- ANTI-P
K- ANTIBARYON
K- ANTINUCLEON
K- BARYON
K- BARYON RESONANCE
K- DEUTERON
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')
*KEK PS (AT TSUKUBA, JAPAN. ONLY FOR EXPERIMENTAL
RESULTS GAINED THERE)
*KHARKOV LINAC (ONLY FOR EXPERIMENTAL RESULTS
GAINED THERE)
-KHURI REPRESENTATION (MODEL, REGGE POLES)
-KIBBLE-HIGGS (FIELD THEORETICAL MODEL, WEINBERG)
-KICKER MAGNET (PULSED MAGNET)
*KIKKAWA-SAKITA-VIRASORU (MODEL, KIKKAWA-SAKITA-
VIRASORU)
-KINEMATIC SUPERSTRUCTURE (DUALITY)
KINEMATICS
-KINK SOLUTION (SEE 'FIELD THEORY, SOLITON')
*KLEIN-GORDON (FIELD EQUATIONS, KLEIN-GORDON)
-KLYSTRON (SEE 'RF SYSTEM')
*KNU (SCALING, KNU)
-KOBA-NIELSEN (MODEL, DUAL RESONANCE)
-KOBA-NIELSEN-JESEN SCALING (SCALING, KNU)
-KOGUT-SUSSKIND (USE 'MODEL, PARTON')
-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 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)

L(1770)
 *LADDER (APPROXIMATION, LADDER)
 -LAGRANGIAN MODEL (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(1815)
 LAMBDA(1830)
 LAMBDA(2100)
 LAMBDA(2350)
 LAMBDA(2585)
 LAMBDA'(1520)
 LAMBDA'(1670)
 LAMBDA''(1690)
 -LAMITON (SEE 'HEAVY LEPTON' AND 'STRONG INTERACTION')
 *LAMP LI'AC (AT LJS ALACMS. ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 -LANDAU MODEL (MODEL, HYDRODYNAMIC)
 LANTHANUM
 *LASER (GENERALLY, 'OPTICS, LASER')
 *LATTICE (*APPROXIMATION, LATTICE* IN FIELD THEORY. ALSO USED FOR ACCELERATOR LATTICES)
 -LATTICE FIELD THEORY (SEE 'APPROXIMATION, LATTICE')
 LAWRENCIUM
 LEAD
 -LEAD-GLASS COUNTER (SEE 'TOTAL-ABSORPTION COUNTER')
 *LEADING PARTICLE (MULTIPLE PRODUCTION, LEADING PARTICLE)
 -LEAST-SQUARES ANALYSIS (USE 'STATISTICAL ANALYSIS')
 LECTURES
 *LEF (FIELD THEORETICAL MODEL, LEE)
 -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')
 *LEVINGRAU IOFFE CYCL (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 *LENINGRAD NUCL INST CYCL (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 LEPTON
 LEPTON ANTI-K0
 LEPTON ANTI-N
 LEPTON ANTI-P
 LEPTON ANTIBARYON
 LEPTON ANTHYPERON
 LEPTON ANTILAMBDA
 LEPTON ANTILEPTON
 LEPTON ANTINEUTRINO
 LEPTON ANTINUCLEON
 LEPTON ANTSIGMA
 LEPTON ANTIXI
 LEPTON BARYON
 LEPTON BARYON RESONANCE
 LEPTON BOSON
 LEPTON DEUTERON
 LEPTON ELECTRON
 LEPTON FERMION
 LEPTON HADRON
 LEPTON HYPERON
 LEPTON INTERMEDIATE BOSON
 LEPTON K
 LEPTON K+
 LEPTON K-
 LEPTON K0
 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 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 DECAY
 -LEPTONIC NUMBER (USUALLY 'CONSERVATION LAW, LEPTON'; SEE ALSO 'QUANTUM NUMBER, LEPTON')
 -LEPTONIC QUARK (LEPTON, QUARK)
 LEPTOPRODUCTION
 -LEVEL CONVERTER (DIGITAL LOGIC)
 -LEXAN (USE 'PLASTICS, TRACK SENSITIVE')
 *LIE (*GROUP THEORY, LIE* OR 'ALGEBRA, LIE')
 LIFETIME (USAGE IN ACCORDANCE WITH ROSENFIELD TABLES)
 -LIGHT CONE ALGEBRA (LIGHT CONE BEHAVIOR)
 LIGHT CONE BEHAVIOR
 LIGHT NUCLEUS (UP TO MASS NUMBER 20)
 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 MEASURING')
 -LOGIC (IF DIGITAL, 'DIGITAL LOGIC', IF IN NANONSECOND 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')
 *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* OR 'MULTIDIMENSIONAL ANALYSIS, LONGITUDINAL PHASE SPACE')
 -LSZ FORMALISM (FIELD THEORY)
 LUMINOSITY
 *LUND ES (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 LUTETIUM

M *M I T LINAC (ONLY FOR EXPERIMENTAL RESULTS
GAINED THERE)
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 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')
MASS
MASS DIFFERENCE
MASS ENHANCEMENT
MASS FORMULA
*MASS NUMBER
-MASS RATIO ('MASS, RATIO'. INCLUDES ALSO
EFFECTIVE-MASS SPECTRA)
-MASS SPECTROMETER (SEE 'MAGNETIC SPECTROMETER')
MASS SPECTRUM (RESTRICTED USE)
-MASS SPLITTING (MASS DIFFERENCE)
-MASS-ZERO PI-ONS (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 (TRANSFORMATIJSN, MELOSH)
-MEMORY (COMPUTER)
MENDELEVUM
MERCURY
*MESIC ATOM
-MESIC MOLECULE (MOLECULE, MESIC ATOM)
MESON (ALSO 'MODEL, MESON')
MESON ANTI-K
MESON ANTI-KO
MESON ANTI-N
MESON ANTI-P
MESON ANTIBARYON
MESON ANTIBARYON
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 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 ANTHYPERON
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 SIGMAO
MESON RESONANCE VECTOR MESON
MESON XI
MESON XI-
MESON XIO
METAL
-MICHAELIS DETECTOR (USE 'MINERAL, TRACK SENSITIVE')
-MICROCAUSALITY (AXIOMATIC FIELD THEORY,
CAUSALITY)
-MICROCOMPUTER (SEE 'MICROPROCESSOR')
MICROPROCESSOR
-MICROTRON (CYCLOTRON, ELECTRON)
MICROWAVES
MINERAL
*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
*MOLECULE
MOLYBDENUM
MOMENT
MOMENTUM
MOMENTUM SPECTRUM
MOMENTUM TRANSFER
MONITORING (SEE ALSO 'BEAM MONITORING')
*MONOCHROMATIC BEAM (PHOTON, MONOCHROMATIC BEAM)
*MONTE CARLO (NUMERICAL CALCULATIONS, MONTE CARLO)
*MOSCOW ITEF PS (ONLY FOR EXPERIMENTAL RESULTS
GAINED THERE)
*MOSCOW LINAC (ONLY FOR EXPERIMENTAL RESULTS
GAINED THERE)
*MOSCOW RI PS (ONLY FOR EXPERIMENTAL RESULTS
GAINED THERE)
*MUELLER (MODEL, MUELLER)
*MULTI-REGGE (REGGE POLES, MULTI-REGGE)
-MULTICHANNEL ANALYZER (SEE 'ANALOG-TO-DIGITAL
CONVERTER')
MULTIDIMENSIONAL ANALYSIS
-MULTILOOP ('FIELD THEORY, HIGHER-ORDER' OR
'DUAL FIELD THEORY, HIGHER-ORDER')
*MULTIMESON (EXCHANGE, MULTIMESON)
*MULTIPERIPHERAL (MODEL, MULTIPERIPHERAL)
*MULTIPHOTON ('EXCHANGE, MULTIPHOTON' AND
'PERTURBATION THEORY')

*MULTIPION (EXCHANGE, MULTIPION)
 *MULTIPLE
 MULTIPLE PRODUCTION
 MULTIPLE SCATTERING
 MULTIPLET
 MULTIPARTICLE
 *MULTIPLY CHARGED
 *MULTIPOLE (PARTIAL-WAVE ANALYSIS, MULTIPOLE)
 -MULTIPOHERON (USE 'PGMERON')
 -MULTIREGGEON (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
 *MUONIUM
 -MUOPRODUCTION (USE 'ELECTROPRODUCTION')
 -MWPC (USE 'PROPORTIONAL CHAMBER')

N N (DENOMINATES 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(1670)
N(1688)
N(1860)
N(2190)
N(2220)
N(2650)
N(3030)
-N* (SEE 'NUCLEON RESONANCE' FOR I=1/2)
-N-PI0 EXCHANGE (EXCHANGE, MULTIPION)
*N-POINT FUNCTIJN ('EQUALITY, N-POINT FUNCTION'
 OR 'MODEL, N-POINT FUNCTION' OR 'MANY-BODY
 PROBLEM')
-N-/ METHOD (PARTIAL WAVE, DISPERSION RELATIONS)
N*(1470)
N*(1520)
N*(1535)
N*(1700)
N*(1780)
-NAKANISHI REPRESENTATION (SPECTRAL
 REPRESENTATION)
-NAMBU (FIELD THEORETICAL MODEL)
-NAMBU-GJUJSJOEN (USE 'SYMMETRY,
 SPONTANEOUSLY BROKEN')
-NANOSECOND ELECTRONICS (FAST LOGIC)
*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,
 WEAK CURRENT)
-NEUTRALS (USE 'NEUTRAL PARTICLE')
NEUTRINO
NEUTRINO ANTI-K0
NEUTRINO ANTI-N
NEUTRINO ANTI-P
NEUTRINO ANTIBARYON
NEUTRINO ANTIHYPERON
NEUTRINO ANTILAMBDA
NEUTRINO ANTINEUTRINO
NEUTRINO ANTNUCLEON
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 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/
NEUTRINO/M/
*NEUTRINOPRODUCTION (USED FOR PRODUCTION BY
 NEUTRINOS OR ANTINEUTRINOS)
-NEUTRON (USE 'N')
-NEUTRON DETECTION (PARTICLE IDENTIFICATION, N)
-NEVEU-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. ONLY FOR EXPERIMENTAL
 RESULTS GAINED THERE)
*NINA ES (AT DARESBURY. ONLY FOR EXPERIMENTAL
 RESULTS GAINED THERE)
 NIOBIUM
 NITROGEN
*NIU (POSTULATED PARTICLE, NIU)
 NOBELIUM
-NOETHER'S THEOREM ('GROUP THEORY' AND
 'CONSERVATION LAW')
*NONABELIAN ('FIELD THEORY, NONABELIAN'; NOT
 USED TOGETHER WITH 'FIELD THEORETICAL MODEL,
 YANG-MILLS')
*NONDIFFRACTIVE
*NONLEPTONIC DECAY (NOT USED FOR RADIATIVE DECAYS)
*NONLINEAR
*NONLOCAL (SEE 'FIELD THEORY, NONLOCAL')
*NONPOLYNOMIAL (FIELD THEORETICAL MODEL,
 NONPOLYNOMIAL)
 NONRELATIVISTIC
*NONRENORMALIZABLE (FIELD THEORETICAL MODEL,
 NONRENORMALIZABLE)
*NONSTRANGE (RESONANCE, NONSTRANGE)
-NORMAL PRODUCT (NOT USED)
*NOVA (MODEL, NOVA)
*NOVOSIBIRSK STOR (ONLY FOR EXPERIMENTAL
 RESULTS GAINED THERE)
*NOVOSIBIRSK STOR2 (ONLY FOR EXPERIMENTAL
 RESULTS GAINED THERE)
*NOVOSIBIRSK STOR3 (ONLY FOR EXPERIMENTAL
 RESULTS GAINED THERE)
*NOVOSIBIRSK STOR4 (ONLY FOR EXPERIMENTAL
 RESULTS GAINED THERE)
-NUCLEAR CASCADE (NUCLEUS, CASCADE)
 NUCLEAR EMULSION
-NUCLEAR EMULSION CHAMBER (USE 'NUCLEAR EMULSION'
 AND POSSIBLY 'TOTAL-ABSORPTION COUNTER')
 NUCLEAR ENGINEERING
 NUCLEAR FORCE
-NUCLEAR MATTER (USE '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 ANTI-P
 NUCLEON ANTIHYPERON
 NUCLEON ANTILAMBDA
 NUCLEON ANTNUCLEON
 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
 NUCLEON OMEGA-
 NUCLEON P
 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 XIO
 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

*J(N) (SYMMETRY, J(N))
 *J(3) (SYMMETRY, J(3))
 *J(3,1) (SYMMETRY, J(3,1))
 *J(4) (SYMMETRY, J(4))
 *J(4,2) (SYMMETRY, J(4,2))
 *DAK RIDGE LINAC (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 -JPEC (EXCHANGE, ONE-BOSON)
 *JCTET (QUARK, OCTET)
 *JCTET DOMINANCE (MODEL, OCTET DOMINANCE)
 -JCTET LENS (QUADRUPOLE 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, IIZUKA-OKUBO-ZWEIG')
 -OKUBO-ZWEIG-IIZUKA RULE (USE 'SELECTION RULE, IIZUKA-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- 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' (NOT FOR PAPERS CONTAINING EXPERIMENTAL RESULTS, EXCEPT WHEN PARTICULARS ARE GIVEN))

0
 -ON-MASS-SHELL (MODEL, ON-SHELL)
 *ON-SHELL (MODEL, ON-SHELL)
 *ONE-BOSON (EXCHANGE, ONE-BOSON)
 -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 (*FIELD THEORY, OPERATOR ALGEBRA* OR 'QUANTUM MECHANICS, OPERATOR ALGEBRA')
 *OPERATOR PRODUCT (FIELD THEORY, OPERATOR PRODUCT)
 -OPERATOR PRODUCT EXPANSION (FIELD THEORY, OPERATOR PRODUCT)
 *OPTICAL (MODEL, OPTICAL)
 *OPTICAL THEOREM (TOTAL CROSS SECTION, OPTICAL THEOREM)
 OPTICS
 ORBIT
 -ORBIT CALCULATIONS (SEE 'BEAM OPTICS' AND 'ORBIT')
 ORGANIC COMPOUNDS
 *ORSAY LINAC (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 *ORSAY STOR (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 *OSCILLATION (NEUTRINO, OSCILLATION)
 *OSCILLATOR (MODEL, OSCILLATOR)
 OSMIUM
 -OVERLAP FUNCTION (DO NOT USE 'OVERLAPPING RESONANCES')
 *OVERLAPPING RESONANCES (MODEL, OVERLAPPING RESONANCES)
 OXYGEN

P
P ANTI-N
P ANTIHYPERON
P ANTILAMBDA
P ANTISIGMA
P ANTI χ
P BARYON RESONANCE
P DEUTERON
P HYPERON
P INTERMEDIATE BOSON
-P INVARIANCE (INVARIANCE, PARITY)
P LAMBDA
P LIGHT NUCLEUS
P N
-P NUCLEON (SEE 'NUCLEON P')
P NUCLEUS
P OMEGA-
P P
P QUARK
P SIGMA
P SIGMA+
P SIGMA-
P SIGMAO
P VECTOR MESON
P Ξ
P Ξ^-
P Ξ^0
-P-WAVE (PARTIAL WAVE)
*PADE (APPROXIMATION, PADE)
PAIR
*PAIR PRODUCTION
PALLADIUM
-PARACHARMONIUM (SEE 'CHARMONIUM')
*PARAMETRIZATION (FOR FUNCTIONAL FITS USE
'INTERPRETATION OF EXPERIMENTS, PARAMETRIZATION'
OR 'NUMERICAL MATHEMATICS, PARAMETRIZATION' OR
'STATISTICAL ANALYSIS, PARAMETRIZATION')
*PARASTATISTICS (STATISTICS,
PARASTATISTICS)
PARITY
-PARTY CHECK (DIGITAL LOGIC)
PARTIAL WAVE
PARTIAL-WAVE ANALYSIS
-PARTIALLY CONSERVED AXIAL-VECTOR CURRENT
(MODEL, PCAC)
-PARTIALLY CONSERVED VECTOR CURRENT (MODEL, PCVC)
PARTICLE
PARTICLE ANTI PARTICLE
PARTICLE IDENTIFICATION
-PARTICLE MODELS ('MODEL, PARTICLE' (RESTRICTED
USE) OR 'MODEL, FERMION' OR 'MODEL, BARYON' OR
'MODEL, BOSON' OR 'MODEL, MESON' OR 'MODEL,
PHOTON' OR 'MODEL, HADRON')
*PARTICLE NUCLEUS
PARTICLE SEPARATOR
PARTICLE SOURCE
-PARTICLE-HOLE MODEL (NUCLEAR PROPERTIES)
*PARTON ('MODEL, PARTON'. SEE ALSO 'MODEL, QUARK
PARTON')
*PATH INTEGRAL (SEE 'FIELD THEORY, PATH INTEGRAL'
OR 'PERTURBATION THEORY, PATH INTEGRAL')
-PATH LENGTH (SEE 'ABSORPTION')
-PATTERN RECOGNITION (SEE 'TRACK DATA ANALYSIS,
ON-LINE' OR 'TRACK DATA ANALYSIS, OFF-LINE')
PC(3510)
*PCAC (MODEL, PCAC)
*PCVC (MODEL, PCVC)
*PERIPHERAL (MODEL, PERIPHERAL)
PERTURBATION THEORY
-PEYRU PLOT ('TRANSVERSE MOMENTUM' AND
'LONGITUDINAL MOMENTUM')
-PHASE SHIFT (PARTIAL WAVE)
*PHASE SPACE ('KINEMATICS, PHASE SPACE' OR
'STATISTICAL ANALYSIS, PHASE SPACE')
-PHASE TRANSITION (SEE 'FIELD THEORY, CRITICAL
PHENOMENA')
-PHENOMENOLOGY (NOT USED)
PHI(1019)
-PHI(1650) (JMEGA(1675))
-PHI-TU-THE-NTH MODEL (FIELD THEORETICAL MODEL,
SCALAR)
PHOSPHORUS
-PHOTOCAPTURE (PHOTON, ABSORPTION)
-PHOTODISINTEGRATION (USE 'PHOTOFISSION')
-PHOTORECETION (SEE 'PHOTOCAPTURE, ABSORPTION' AND
'EXCITED NUCLEUS')
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 ANTI χ
PHOTON BARYON
PHOTON BARYON RESONANCE
PHOTON BOSON
PHOTON DEUTERON
PHOTON ELECTRON
-PHOTON EXCHANGE (EXCHANGE, PHOTON)
PHOTON FERMION
PHOTON HADRON
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 SIGMAO
-PHOTON SPECTROMETER (SEE 'TOTAL-ABSORPTION
COUNTER')
-PHOTON SPLITTING (ELECTROMAGNETIC INTERACTION,
HIGHER-ORDER)
PHOTON VECTOR MESON
PHOTON Ξ
PHOTON Ξ^-
PHOTON Ξ^0
PHOTOPRODUCTION (FOR Q-SQUARED UNEQUAL 0, USE
'ELECTROPRODUCTION')
PI
PI ANTI-KO
PI ANTI-N
PI ANTI-P
PI ANTIBARYON
PI ANTIHYPERON
PI ANTILAMBDA
PI ANTINUCLEON
PI ANTISIGMA
PI ANTI χ
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 PI-
PI PIO
PI QUARK
PI SIGMA
PI SIGMA+
PI SIGMA-
PI SIGMAO
PI VECTOR MESON

PI XI
 PI XI-
 PI XIO
 -PI(1640) (A3(1640))
 -PI(975) (DELTA(970))
 PI+
 PI+ ANTI-KO
 PI+ ANTI-N
 PI+ ANTI-P
 PI+ ANTIBARYON
 PI+ ANTIHYPERON
 PI+ ANTLAMBDA
 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+ 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- ANTLAMBDA
 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- SIGMAO
 PI- VECTOR MESON
 PI- XI
 PI- XI-
 PI- XIO
 *PI-RHO(765)-OMEGA(784) (CCOUPLING,
 PI-RHO(765)-OMEGA(784))
 PI/RHO(1540)
 -PION EXCHANGE ('EXCHANGE, ONE-PION' OR 'EXCHANGE,
 MULTIPION')
 -PIONIC DECAY (USE 'NONLEPTONIC DECAY')
 *PIONIZATION (MULTIPLE PRODUCTION, PICNIZATION)
 PIO
 PIO ANTI-KO
 PIO ANTI-N
 PIO ANTI-P
 PIO ANTIBARYON
 PIO ANTIHYPERON
 PIO ANTLAMBDA
 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 PIO
 PIO QUARK
 PIO SIGMA
 PIO SIGMA+
 PIO SIGMA-
 PIO SIGMAO
 PIO VECTOR MESON
 PIO XI
 PIO XI-
 PIO XIO
 *PLANAK (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')
 *PLUTJ (AT DURIS AND PETRA; 'MAGNETIC DETECTOR,
 PLUTO')
 PLUTONIUM
 -PJINCARE GROUP (GROUP THEORY, LORENTZ)
 *POKORSKI-SATZ-SCHILLING (MÜDEL, POKORSKI-SATZ-
 SCHILLING)
 *POLAKIZABILITY
 POLARIZATION
 *POLARIZED BEAM
 *POLARIZED TARGET
 *POLE (APPROXIMATION, POLE)
 -POLE DOMINANCE ('MUJEL, POLE' OR 'MÜDEL,
 RESONANCE')
 POLONIUM
 *POMERANCHUK THEOREM (TOTAL CROSS SECTION,
 POMERANCHUK THEOREM)
 POMERON (ALSO 'POMERON, MULTI-REGGE')
 -POMERON COUPLING (POMERON, COUPLING)
 -POMERON EXCHANGE (POMERON, EXCHANGE)
 -PJMERON-POMERON COUPLING (POMERON, COUPLING)
 -PJMERON-POMERON-POMERON COUPLING (POMERON,
 COUPLING)
 *POSITION SENSITIVE (COUNTERS AND DETECTORS,
 POSITION SENSITIVE)
 POSITIVE PARTICLE
 -POSITIVITY (SEE 'AXIOMATIC FIELD THEORY')
 POSITRON
 POSITRON ANTI-KO
 POSITRON ANTI-N
 POSITRON ANTI-P
 POSITRON ANTIBARYON
 POSITRON ANTIHYPERON
 POSITRON ANTLAMBDA
 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-
 POSITRON KO
 POSITRON LAMBDA
 POSITRON LIGHT NUCLEUS
 POSITRON MESON
 POSITRON MESON RESONANCE

P 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
POSITRION
POSTULATED PARTICLE
POTASSIUM
POTENTIAL
-PJTENTIAL MODEL (PJTENTIAL 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 (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
*PRISM PLUT (MULTIDIMENSIONAL ANALYSIS, PRISM PLUT)
-PROBABILITY (STATISTICS)
-PROCESS CONTROL COMPUTER (COMPUTER, CONTROL SYSTEM)
*PRODUCTION
-PRODUCTION CROSS SECTION ('PRODUCTION' AND (GENERALLY) 'TOTAL CROSS SECTION')
PROGRAMMING
-PROJECT ('EXPERIMENTAL EQUIPMENT, PROPOSED' OR 'ACCELERATOR, PROPOSED')
PROMETHIUM
-PROMPT PARTICLE (USE 'DIRECT PRODUCTION')
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
-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(3950) STRUCTURE
PSI(44100) STRUCTURE
PSI(4400)
-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/Z SPECTROMETER (MAGNETIC SPECTROMETER)
QUADRUPOLE LENS
-QUANTAMETER (SEE 'IONIZATION CHAMBER' AND 'BEAM MONITORING')
QUANTIZATION
QUANTUM CHROMODYNAMICS
QUANTUM ELECTRODYNAMICS
-QUANTUM FIELD THEORY (USE 'FIELD THEORY')
QUANTUM MECHANICS
QUANTUM NUMBER
QUARK
QUARK ANTIQUARK
QUARK INTERMEDIATE BOSON
-QUARK MODEL (QUARK)
*QUARK PARTON (MODEL, QUARK PARTON)
QUARK QUARK
-QUARK SEARCH ('SEARCH FOR, QUARK'. ONLY FOR EXPERIMENTAL SEARCHES FOR QUARKS)
-QUARK-GLUON (SEE 'QUARK, GLUON' OR 'FIELD THEORY, ASYMPTOTIC FREEDOM')
*QUARTET (QUARK, QUARTET)
*QUASICLASSICAL (APPROXIMATION, QUASICLASSICAL)
-QUASIELASTIC SCATTERING (USE 'ELASTIC SCATTERING')
*QUASIPOTENTIAL (MODEL, QUASIPOTENTIAL)
*QUINTET (QUARK, QUINTET)
Q1(1300)
Q2(1400)

RADIATION
-RADIATION DETECTOR (NOT USED. SEE MORE SPECIFIC KEYWORDS)
-RADIATION DOSE (SEE 'DOSIMETRY')
-RADIATION EFFECT (SEE 'RADIATION, EFFECT')
RADIATION LENGTH
-RADIATION PROTECTION (SEE 'ABSORPTION' OR 'ENERGY LOSS' OR 'SHIELDING' OR 'HEALTH PHYSICS' OR 'DOSIMETRY')
***RADIATIVE CAPTURE**
-RADIATIVE CORRECTION (FOR ELECTRON SCATTERING ONLY. IN OTHER CASES SEE 'FEYNMAN GRAPH')
***RADIATIVE DECAY** (SEE ALSO 'ELECTROMAGNETIC DECAY')
RADIOACTIVITY
-RADIOCHEMISTRY ('RADIODACTIVITY' AND 'CHEMISTRY')
RADIUM
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-SCHWINGER)
-*RATIO (SEE 'TOTAL CROSS SECTION, RATIO' OR 'WIDTH, RATIO' OR '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 ('MUJEL, REGGE CUT'; ONLY FOR PAPERS TREATING MODELS)
REGGE POLES
-REGGE TRAJECTORIES (SEE 'REGGE POLES')
-REGGEON (SEE 'REGGE POLES' OR 'REGGE POLES, REGGEON FIELD THEORY')
-*REGGEON FIELD THEORY (REGGE POLES, REGGEON FIELD THEORY)
-*REGGEON-PARTICLE (SEE 'SCATTERING, REGGEON-PARTICLE' OR 'COUPLING, 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
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(765)0
-RHO-OMEGA (INTERFERENCE, RHO(765)-OMEGA(784))
-RHO*(1600)
RHODIUM
-ROPER RESONANCE (N(1470))
-*ROSENBLUTH FORMULA ('EXCHANGE, ONE-PHOTON' AND E.G., 'ELECTRON P, ROSENBLUTH FORMULA')
-ROSS-STJOLESKY (RHO(765), PHOTOPRODUCTION)
-*ROT (PROPOSED FOR PETRA; 'MAGNETIC DETECTOR, ROT')
-ROTATION
-*ROTATIONAL (SYMMETRY, ROTATIONAL)
-*ROTATIONAL STATE (MODEL, ROTATIONAL STATE)
-*ROTATOR (MODEL, ROTATOR)
RUBBER
RUBIDIUM
RUTHENIUM

S S(1930)
 S*(1000)
 S-MATRIX
 -S-WAVE (PARTIAL WAVE)
 *SACLAY LINAC
 *SACLAY PS (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 SAFETY (FOR ASPECTS OTHER THAN NUCLEAR. SEE ALSO 'HEALTH PHYSICS' OR 'DOSEMETRY' OR 'SHIELDING')
 *SAKATA (MODEL, SAKATA)
 -SALAM-STRATHDEE (FIELD THEORY, SUPERSYMMETRY)
 -SALAM-WEINBERG MODEL (FIELD THEORETICAL MODEL, WEINBERG)
 SAMARIUM
 -SANWICH COUNTER (SEE, E.G., 'SCINTILLATION COUNTER, LEAD'; OR E.G., 'CHERENKOV COUNTER, IRON')
 *SASKATTON LINAC (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 *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')
 -SCALER (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 (CAMAC SYSTEM, CONTROLLER)
 *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)
 *SEAGULL (EFFECT, SEAGULL)
 SEARCH FOR (ONLY FOR EXPERIMENTAL SEARCHES FOR POSTULATED PARTICLES)
 -SECOND QUANTIZATION (FIELD THEORY, QUANTIZATION)
 -SECOND-CLASS CURRENT (WEAK INTERACTION, CURRENT)
 -SECONDARY PARTICLE
 SECONDARY RADIATION
 -SECONDARY-EMISSION MONITORING (BEAM MONITORING)
 -SECTOR-FOCUSING CYCLOTRON (CYCLOTRON, ISOCIRCUUS)
 -SECURITY (SEE 'SAFETY' OR 'HEALTH PHYSICS' OR 'DOSEMETRY' OR 'SHIELDING')
 SELECTION RULE
 SELENIUM
 -SELF-CONSISTENT CALCULATION ('BOOTSTRAP' OR, IF QUANTUM MECHANICS, 'APPROXIMATION, HARTREE-FOCK')
 -SELF-COUPLING (NOT USED)
 -SELF-ENERGY (PROPAGATOR, RENORMALIZATION)
 -SELF-INTERACTION (RENORMALIZATION)
 -SEMICLASSICAL (SEE 'APPROXIMATION, QUASICLASSICAL' OR 'APPROXIMATION, WKB')
 SEMICONDUCTOR
 SEMICONDUCTOR DETECTOR (SEE ALSO 'SOLID-STATE COUNTER')
 -SEMIINCLUSIVE REACTION (USE 'INCLUSIVE REACTION')
 *SEMILEPTONIC DECAY
 *SENDAI LINAC (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 *SEPARABLE POTENTIAL (MODEL, SEPARABLE POTENTIAL)
 *SEPARATED-ORBIT (CYCLOTRON, SEPARATED-ORBIT)
 *SEPTET (QUARK, SEPTET)
 -SEPTUM MAGNET (SEE 'MAGNET, EJECTION')
 *SERIAL HIGHWAY (CAMAC SYSTEM, SERIAL HIGHWAY)
 *SERPUKHOV PS (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 *SEXETET (QUARK, SEXETET)
 -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 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(1765)
 SIGMA(1915)
 SIGMA(2030)
 SIGMA(2250)
 SIGMA(2455)
 SIGMA(2620)
 SIGMA+
 SIGMA+ BARYON RESONANCE
 SIGMA+ DEUTERON
 SIGMA+ INTERMEDIATE BOSON
 SIGMA+ NUCLEUS
 SIGMA+ QUARK
 SIGMA+ SIGMA-
 SIGMA+ SIGMA0
 SIGMA+ VECTOR MESON
 SIGMA-
 SIGMA- BARYON RESONANCE
 SIGMA- DEUTERON
 SIGMA- INTERMEDIATE BOSON
 SIGMA- NUCLEUS
 SIGMA- QUARK
 SIGMA- VECTOR MESON
 SIGMA'(1670)
 SIGMA'(1750)
 SIGMA'(1940)
 SIGMA0
 SIGMA0 BARYON RESONANCE
 SIGMA0 DEUTERON
 SIGMA0 INTERMEDIATE BOSON
 SIGMA0 NUCLEUS
 SIGMA0 QUARK
 SIGMA0 SIGMA-
 SIGMA0 VECTOR MESON
 SILICON
 SILVER
 *SIN CYCL (AT VILLAGEN. ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 *SINE-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 PRODUCTION')
 -SINGLE-ARM SPECTROMETER (SEE 'MAGNETIC SPECTROMETER')
 -SINGLE-LOOP APPROXIMATION ('FEYNMAN GRAPH, HIGHER-ORDER' OR 'DUAL FIELD THEORY, HIGHER-ORDER')
 -SKELETON (FEYNMAN GRAPH)
 *SL(2,C) (SYMMETRY, SL(2,C))
 *SLAC LINAC (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 *SLAC STUR (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
 *SLAVNOV IDENTITY (GAUGE FIELD THEORY, SLAVNOV IDENTITY)
 *SMALL-ANGLE
 -SMOKATRON (ACCELERATOR, ELECTRON RING)
 *SO(N) (SYMMETRY, SO(N))
 *SO(2,2) (SYMMETRY, SO(2,2))
 *SO(3) (SYMMETRY, SO(3))
 *SO(4) (SYMMETRY, SO(4))
 *SODING (MODEL, SODING)
 SODIUM
 -SOFT PHOTON (IRRADIATIVE CORRECTION)
 -SOFT PIONS ('CURRENT ALGEBRA, EFFECTIVE LAGRANGIANS' OR 'MODEL, PCAC')
 SOLID-STATE COUNTER (SEE ALSO 'SUPERCONDUCTOR DETECTOR')
 SOLIDS
 *SOLITON (FIELD THEORY, 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 (ONLY FOR EXPERIMENTAL
RESULTS GAINED THERE)
- 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 STORE')
- * 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 'HADRON SPECTROSCOPY')
- SPECTROSCOPY (SEE 'SPECTROMETER' OR 'MAGNETIC
SPECTROMETER'. SEE ALSO 'HADRON SPECTROSCOPY')
- SPIN
- SPIN FLIP (SEE 'AMPLITUDE ANALYSIS')
- SPIN NONFLIP (SEE 'AMPLITUDE ANALYSIS')
- 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)
- * 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')
- * STATISTICAL (MODEL, STATISTICAL)
- STATISTICAL ANALYSIS (RESTRICTED TO BASIC
PAPERS)
- STATISTICAL BOOTSTRAP (BOOTSTRAP, STATISTICAL)
- STATISTICAL MECHANICS
- STATISTICAL TENSOR (SPIN, DENSITY MATRIX)
- STATISTICS
- STEEL
- * 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)
- * STODOLSKY-SAKURAI (MODEL, STODOLSKY-SAKURAI)
- STORAGE RING (FOR ACCELERATOR ASPECTS ONLY; FOR
EXPERIMENTAL RESULTS USE 'COLLIDING BEAMS')
- STRANGE PARTICLE
- STRANGENESS

- * STRANGENESS CHANGING (CURRENT, STRANGENESS
CHANGING)
- 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))
- * SU(N) X SU(N) (SYMMETRY, SU(N) X SU(N))
- * SU(1,1) (SYMMETRY, SU(1,1))
- * SU(2) (SYMMETRY, SU(2))
- * SU(2) X SU(2) (SYMMETRY, SU(2) X SU(2))
- * SU(2) X U(1) (SYMMETRY, SU(2) X U(1))
- * SU(2) X U(1) X SU(3)
(SYMMETRY, SU(2) X U(1) X SU(3))
- * SU(2)W (SYMMETRY, SU(2)W)
- * SU(2,2) (SYMMETRY, SU(2,2))
- * SU(3) (SYMMETRY, SU(3))
- * SU(3) X SU(3) (SYMMETRY, SU(3) X SU(3))
- * SU(3) X SU(3) (SYMMETRY, SU(3) X SU(3))
- * SU(3) X U(1) (SYMMETRY, SU(3) X U(1))
- * SU(3)' (SYMMETRY, SU(3)')
- * SU(3)'' X SU(3)''' (SYMMETRY, SU(3)'' X SU(3)''')
- * SU(3)''' (SYMMETRY, SU(3)'''')
- * SU(4) (SYMMETRY, SU(4))
- * SU(4) X SU(4) (SYMMETRY, SU(4) X SU(4))
- * SU(6) (SYMMETRY, SU(6))
- * SU(6) X O(3) (SYMMETRY, SU(6) X O(3))
- * SU(6)W (SYMMETRY, SU(6)W)
- * SU(8) (SYMMETRY, 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, SUPER SYMMETRY)
- SUPERGAUGE (GAUGE FIELD THEORY, SUPERSYMMETRY)
- SUPERMULTIPLLET (USE 'MULTIPLLET')
- 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

T
-T-INVARIANCE (INVARIANCE, TIME REVERSAL)
-T-MATRIX (S-MATRIX)
TABLES
*TACHYON (POSTULATED PARTICLE, TACHYON)
*TAPOULE (FEYNMAN GRAPH, TAPOLE)
*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 HAVE ENTRY (TALK) AFTER TITLE.)
TANTALUM
TARGET
-TARGET POLARIZATION (USE 'TARGET, POLARIZATION' FOR MEASUREMENT OF POLARIZATION DEGREE. SEE ALSO 'POLARIZED TARGET')
*TASSO (PROPOSED FOR PETRA; 'MAGNETIC DETECTOR, TASSO')
-TCP (SEE 'CPT')
-TOC (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)
TERBIUM
THALLIUM
THEORY OF ELEMENTARY PARTICLES
-THERMAL SHIELDING (VACUUM SYSTEM)
*THERMODYNAMICAL (MODEL, THERMODYNAMICAL)
THERMODYNAMICS
*THERMOLUMINESCENCE (COUNTERS AND DETECTORS, THERMOLUMINESCENCE)
THESIS (INCLUDING SOME MASTERS' THESES)
*THIRRING (FIELD THEORETICAL MODEL, THIRRING)
THORIUM
-THREE-BODY ANNIHILATION (MULTIPLE PRODUCTION, ANNIHILATION)
THREE-BODY PROBLEM
-THREE-MESON (SEE 'EXCHANGE, MULTIMESON')
-THREE-PHOTON (SEE 'EXCHANGE, MULTIPHOTON')
-THREE-PION (SEE 'EXCHANGE, MULTIPION')
-THREE-POINT FUNCTION (VERTEX FUNCTION)
THRESHOLD
THULIUM
-TIME DISTRIBUTION (SEE 'TIME VARIATION'; ONLY USED FOR COSMIC RADIATION OR FUNDAMENTAL CONSTANTS)
*TIME MEASUREMENT (SEE ALSO 'FAST LOGIC, TIME RESOLUTION')
*TIME RESOLUTION (COUNTERS AND DETECTORS, TIME RESOLUTION)
TIME-OF-FLIGHT' OR 'FAST LOGIC, COINCIDENCE')
*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 (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)

-TOLLER POLE MODEL ('PARTIAL WAVE' AND 'ANALYTIC PROPERTIES')
*TOMSK ES (ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
-TOPOLOGICAL CROSS SECTION (CHANNEL CROSS SECTION)
*TOPLOGICAL EXPANSION (DUALITY, TOPOLOGICAL EXPANSION)
TOTAL CROSS SECTION (SEE ALSO 'CHANNEL CROSS SECTION')
TOTAL-ABSORPTION COUNTER
-TOUSCHEK EFFECT (BEAM INSTABILITY)
-TPC (TIME-TO-PULSE-HEIGHT CONVERTER; 'FAST LOGIC')
-TRACK CHAMBER (SEE 'TRACK SENSITIVE')
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 MATTER, 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 (CURRENT ALGEBRA, EFFECTIVE LAGRANGIANS)
-TREIMAN-YANG TEST (DECAY, ANGULAR DISTRIBUTION)
-TRIANGLE ANOMALY
-TRIANGLE GRAPH (FEYNMAN GRAPH)
-TRIGGERING (FAST LOGIC, COINCIDENCE)
-TRIPLE-POMERON COUPLING (POMERON, COUPLING)
*TRIPLE-REGGE LIMIT (INCLUSIVE REACTION, TRIPLE-REGGE LIMIT)
*TRIPLET ('MODEL, TRIPLET' AND 'QUARK')
TRITIUM
*TRIUMF CYCL (AT VANCOUVER. ONLY FOR EXPERIMENTAL RESULTS GAINED THERE)
-TRUSS GRAPH (APPROXIMATION, LADDER)
-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-PARTICLE (EXCHANGE, TWO-PARTICLE)
*TWO-PHOTON (EXCHANGE, TWO-PHOTON)
*TWO-PION (EXCHANGE, TWO-PION)

*U(N) (SYMMETRY, U(N))
 *U(1) (SYMMETRY, U(1))
 *U(12) (SYMMETRY, U(12))
 U(2375)
 *U(3) (SYMMETRY, U(3))
 *U(3) X U(3) (SYMMETRY, U(3) X U(3))
 *U(4) (SYMMETRY, U(4))
 *U(4) X U(4) (SYMMETRY, U(4) X U(4))
 *U(6) (SYMMETRY, U(6))
 *U(6,6) (SYMMETRY, U(6,6))
 *U-SPIN (QUANTUM NUMBER, L-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 (GRUPP
 THEORY)
 -UNIVERSAL FERMI 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
 *URBANA BEATRON (ONLY FOR EXPERIMENTAL RESULTS
 GAINED THERE)
 *URBARYON (MODEL, URBARYON)

-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 BOSON (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-JF-FLIGHT)
 *VENEZIANO (MODEL, VENEZIANO)
 VERTEX FUNCTION
 -VERTEX SPECTROMETER (SEE 'HYBRID SYSTEM')
 VIOLATION
 *VIKASORU (MODEL, VIRASORU)
 -VIRASORU ALGEBRA (ALGEBRA, VIRASORU)
 -VIRTUAL (NOT USED)
 -VIRTUAL PHOTOPRODUCTION (USE 'ELECTROPRODUCTION';
 FOR Q-SQUARED $\rightarrow 0$ ADD 'PHOTOPRODUCTION')
 *VON NEUMANN (ALGEBRA, VON NEUMANN)
 *VORTEX (SEE 'FIELD THEORY, VORTEX')

W (ALGEBRA, W*)
 -W-SPIN (SYMMETRY, SU(6)*)
 -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-SUMMERFIELD TRANSFORMATION (REGGE POLES)
 -WAVE EQUATION (QUANTUM MECHANICS)
 -WAVE FUNCTION (QUANTUM MECHANICS)
 -WAVE PACKET (QUANTUM MECHANICS)
 -WAVEGLIDE (SEE 'RF SYSTEM' OR 'LINEAR
 ACCELERATOR' OR 'MICROWAVES')
 -WEAK ABSORPTION (MODEL, ABSORPTION)
 -WEAK COUPLING (PERTURBATION THEORY)
 *WEAK CURRENT
 WEAK INTERACTION (ALSO 'MODEL, 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.,
 'PRODUCTION, WIDE-ANGLE')
 *WIDE-GAP (SPARK CHAMBER, WIDE-GAP)
 *WIDTH (USAGE IN ACCORDANCE WITH ROSENFIELD TABLES)
 -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)

X X(2830)
-X(4100) STRUCTURE (PSI(4100) STRUCTURE)
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(1820)
XI(1940)
XI-
XI- ANTI-XI-

XI- BARYON RESONANCE
XI- DEUTERON
XI- INTERMEDIATE BOSON
XI- LIGHT NUCLEUS
XI- NUCLEUS
XI- QUARK
XI- XI-
XI0
XI0 BARYON RESONANCE
XI0 DEUTERON
XI0 INTERMEDIATE BOSON
XI0 LIGHT NUCLEUS
XI0 NUCLEUS
XI0 QUARK
XI0 XI-
-XI0 MESON RESONANCE (ETA'(958))

Y ~Y* (BARYON RESONANCE, HYPERCN)
*YANG (MODEL, YANG)
-YANG-FELDMAN EQUATIONS (FIELD THEORY)
*YANG-MILLS (FIELD THEORETICAL MODEL, YANG-MILLS)
*YIELD (IN COMBINATION WITH PARTICLES. ONLY
WHERE YIELD IS GIVEN WITHOUT CROSS SECTIONS)

YTTERBIUM
YTTRIUM
*YUKAWA (POTENTIAL, YUKAWA)

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,
IZUKA-OKUBU-ZWEIG)