Appendix A
List of Acronyms

ABJ	Adler–Bell–Jackiw (anomaly)
AF	Asymptotic Freedom
AGS	Alternating Gradient Synchrotron
ALP	Axion-Like Particle
BHLS	Broken Hidden Local Symmetry (Lagrangian)
BMT	Bargmann–Michel–Telegdi (equation)
BNL	Brookhaven National Laboratory
BO	Betatron Oscillations
BPP	Bijnens–Pallante–Prades
BW	Breit–Wigner (resonance)
BZ	Barr-Zee (diagrams)
C	Charge-conjugation
CC	Charged Current
CDM	Cold Dark Matter
CERN	European Organization for Nuclear Research
CHPT	Chiral Perturbation Theory
CHPS	Colangelo–Hoferichter–Procura–Stoffer
CKM	Cabibbo–Kobayashi–Maskawa (quark flavor mixing matrix)
C.L.	Confidence Level
CM or c.m.	Center of Mass
CP	parity $\times$ charge-conjugation (symmetry)
CPT	time-reversal $\times$ parity $\times$ charge-conjugation (symmetry)
CQM	Constituent Quark Model
CS	Callan–Symanzik (equation)
CVC	Conserved Vector Current
DESY	Deutsches Elektronen-Synchrotron
DIS	Deep Inelastic Scattering
DR	Dispersion Relation/Dimensional Regularization
DRA	Dispersion Relation Approach (to HLbL)
DSE	Dyson-Schwinger Equation
ED	Extra Dimension ($D - 4 \geq 1$)

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Springer Tracts in Modern Physics 274, DOI 10.1007/978-3-319-63577-4

EDM	Electric Dipole Moment
EFT	Effective Field Theory
em or e.m.	Electromagnetic
ENJL	Extended Nambu–Jona-Lasinio (model)
ENR	Extremely Narrow Resonances
EW	Electro Weak
EWSB	Electro–Weak Symmetry Breaking
exp (suffix/index)	experimental
FCNC	Flavor Changing Neutral Currents
FNAL	Fermi National Accelerator Laboratory (Batavia, Illinois, USA)
FP	Faddeev–Popov (Lagrangian)
F.P.	Finite Part (integral)
FSR	Final State Radiation
GF	Gauge Fixing (Lagrangian)
GMOR	Gell-Mann, Oakes and Renner (relation)
GS	Gounaris–Sakurai (parametrization)
h.c.	Hermitian conjugate
HFS	Hyper Fine Structure
HK	Hayakawa–Kinoshita
HKS	Hayakawa–Kinoshita–Sanda
HLbL	Hadronic Light-by-Light
HLS	Hidden Local Symmetry
H.O. or HO	Higher Order
HVP	Hadronic Vacuum Polarization
ILC	International Linear Collider (future e^+e^- collider)
IR	InfraRed
ISR	Initial State Radiation
J-PARC	Japan Proton Accelerator Research Complex
KEK	High Energy Accelerator Research Organization, KEK, Japan
KLN	Kinoshita–Lee–Nauenberg (theorem)
KN	Knecht–Nyffeler
KNO	Kinoshita–Nizic–Okamoto
LAMPF	Los Alamos Meson Physics Facility
LbL	Light-by-Light
L.D. or LD	Long Distance
LEP	Large Electron Positron (collider)
LFV	Lepton Flavor Violation
LHC	Large Hadron Collider
LL	Leading Logarithm
LMD	Leading Meson Dominance
LNC	Large N_c
L.O. or LO	Lowest Order (Leading Order)
LOSP	Lightest Observable SUSY Particle
LSP	Lightest Supersymmetric Particle
LSZ	Lehmann, Symanzik, Zimmermann (reduction formalism)

MS	Minimal Subtraction
μSR	Muon Storage Ring
MV	Melnikov–Vainshtein
NC	Neutral Current
NJL	Nambu–Jona-Lasinio (model)
NLL	Next to Leading Logarithm
NLO	Next to Leading Order
NNLO	Next-to-Next Leading Order
NMR	Nuclear Magnetic Resonance
NP	New Physics/Non-Perturbative
NχQM	Non-Local Chiral Quark Model
1PI	One Particle Irreducible
OPE	Operator Product Expansion
OZI	Okubo–Zweig–Iizuka (rule)
P	Parity (Space-reflection)
PCAC	Partially Conserved Axialvector Current
PMT	Photo Multiplier Tube
pQCD	perturbative QCD
PSI	Paul Scherrer Institut
PV	Pauk–Vanderhaeghen
QCD	Quantum Chromodynamics
QED	Quantum Electrodynamics
QFT	Quantum Field Theory
QM	Quantum Mechanics
QPM	Quark Parton Model
RG	Renormalization Group
RLA	Resonance Lagrangian Approach
S.D. or SD	Short Distance
SD	Standard Deviation (1 SD $= 1\ \sigma$)
SLAC	Stanford Linear Accelerator Center
SM	Standard Model (of electroweak and strong interactions)
sQED	scalar QED
SSB	Spontaneous Symmetry Breaking
SUGRA	Supergravity
SUSY	Supersymmetry
SVZ	Shifman–Vainshtein–Zakharov
T	Time-reversal
TDHM	Two Doublet Higgs Model
TEVATRON	TeV Proton-Antiproton Collider at FNAL
TFF	Transition Form Factor
the (suffix/index)	theoretical
UV	UltraViolet
VEV	Vacuum Expectation Value
VMD	Vector Meson Dominance
VP	Vacuum Polarization

VVA	Vector-Vector-Axialvector (amplitude)
WMAP	Wilkinson Microwave Anisotropy Probe
WT	Ward–Takahashi (identity)
WZW	Wess–Zumino–Witten (Lagrangian)
YM	Yang–Mills

[1]

[1] KLOE, CMD, SND, MD, BaBar, Belle, BES, E821, NA7, CLEO, CELLO, TASSO are names of detectors, experiments or collaborations see Table 5.1. ALEPH, DELPHI, L3 and OPAL are LEP detector/collaborations, CDF and D0 are TEVATRON detectors/collaborations.

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