

LVC Abbreviations and Acronyms

Abbreviation / Acronym	Expansion
AA	Automatic Alignment
AAAS	American Association for the Advancement of Science
AC	Acoustic probe
AC	Alternating Current
AC	AC readout coupling
AC	AC signal
ACA	Actuator CAge
ACC	ACCelerometer
ACIGA	Australian Consortium for Interferometric Gravitational Astronomy
ACL	Algorithms for Control and Locking
ACWP	Actual Cost of Work Performed
ADC	Analog-to-Digital Converter
ADCU	Analogue Data Collection Unit
ADE	Advanced Detector Era
AdL	Please see the preferred acronym "aLIGO"
AdV	Advanced Virgo
AdVirgo	Advanced Virgo
AI	Alignment
aLIGO	The Advanced LIGO Detector, housed in the LIGO Observatories
AEI	Albert Einstein Institute
Alp	Automatic Locking processes signals
ALP	Automation of the Locking Procedure
ALS	Auxiliary Laser System
ALUK	Advanced LIGO UK Consortium
AM	Amplitude Modulation
AMC	Advanced Mezzanine Card
AMU	Atomic Mass Unit
ANU	Australian National University
AOC	Adaptive Optics Compensation
AOI	Angle Of Incidence
AOM	Acousto-Optic Modulator
AOS	Auxiliary Optics System
API	Application Programming Interface
AR	Anti-Reflective
ARM	Advanced RISC Machine
AS	Antisymmetric
AS1	Antisymmetric port, PD 1
AS2	Antisymmetric port, PD 2
AS3	Antisymmetric port, PD 3
AS4	Antisymmetric port, PD 4
ASC	Alignment Sensing and Control
ATM	Asynchronous Transfer Mode
ATR	Acceptance Test Report

LVC Abbreviations and Acronyms

Abbreviation / Acronym	Expansion
AWG	Arbitrary Wave-form Generator: the system used to inject signals into the interferometer, including injections.
B#	optical Beam number #
B1	Beam at dark fringe port, after OMC
B1p	Beam at dark fringe port, before OMC
B1s	Beam at dark fringe port, reflected by OMC
B2	Beam going back to the laser, between IMC and EOM
B5	Beam from North arm reflected by second face of BS (beam in PRC)
B7	Beam in West arm cavity
B8	Beam in North arm cavity
BAB	Bright Alugnment Beam
BBH	Binary Black Hole
BC	Beam Control
BCS	Beam Centering Servo
BD	Beam Director
BD	BuilDing
BDCE	Central Building
BDNE	North End Building
BDMC2	Beam
BDWE	West End Building
BH	Black Hole
BH-BH	Black Hole - Black Hole binary
BJ	Beam Jitter
BLRMS	Band-Limited Root-Mean-Square
BMS	Beam Monitoring System
BNS	Binary Neutron Stars
BP	Barometric Pressure
BPC	Beam Pointing Control
BPCU	Beam Pointing Control Unit
BPO	Barometric Pressure Outside
BRDF	Bidirectional Reflectance Distribution Function
BRMSMon	Band Root Mean Square Monitor
BRS	BuRSt
BRST	Burst Monitor
Bruco	Brute-force coherence
BS	Beam Splitter
Bs	Beam source signals (Injection system signals)
BSC	Basic Symmetric Chamber: large vacuum chamber enclosing the suspended core optics
BSD	Band Sampled Data
BT	Beam Tube
BT1	Beam Tube, y arm, ~30m

LVC Abbreviations and Acronyms

Abbreviation / Acronym	Expansion
BT2	Beam Tube, y arm, 500m
BT3	Beam Tube, y arm, 1000m
BT4	Beam Tube, y arm, 1500m
BT5	Beam Tube, y arm, ~1990m
BTE	Beam Tube Enclosure
BUFFALO	Brute-force Utilities For Finding Annoying Lines and Others
C0	C0 building
C27	Crate 27 of photodiodes
CA	Channel Access
Ca	Calibration: the process of converting differential arm length changes into h(t)
CACR	Center for Advanced Computer Research (Caltech)
CAL	Calibration: the process of converting differential arm length changes into h(t)
CAL	CALibrations
CALVA	CAvites pour le Lock de Virgo Avance
CARM	Common Arm
CB	Central Building
CBC	Compact Binary Coalescence
CC	Coherent Control
CC	Computing Center
CC	Corrective Coating
CCB	Change Control Board
CCB	Coherent Control Beam
CCD	Charged Coupled Device
CCO	Commissioning COordinator
CDR	Conceptual Design Review
CDRL	Contract Data Requirements List
CDS	Control and Data acquisition System
CE	Central Building
CEB	Central Building
CHRoCC	Central Heating Radius of Curvature Correction
CIT	California Institute of Technology
CITF	Virgo Central INTERferometer
CMRF	Common Mode Rejection Factor
CMRR	Common Mode Rejection Ratio
CMS	Control and Monitoring System (part of CDS)
CMT	Configuration Management Tool
CNRS	Centre National de la Recherche Scientifique
COAR	Coarse actuator
COC	Core Optics Components
COIL	Coil current: the signal within the magnetic coils providing excitation to the test masses

LVC Abbreviations and Acronyms

Abbreviation / Acronym	Expansion
COM	Center Of Mass
COM	instrumental COMmunication
COMP	COMPensator
corr	correction
CORR	Correction
COS	Core Optics Support
CP	Compensation Plate
CR	Coil Relay
CT	CryoTrap
CTM	Common Test Mass
CVS	Concurrent Version-control System
CW	Continuous Wave
cWB	coherent WaveBurst
DA	Data Analysis
DAA	Data Analysis and Astronomy
DAC	Digital-to-Analog Converter
DACO	Data Analysis COordinator
DAG	Directed Acyclic Graph
DAG	Data Analysis Group
DAQ	Data AcQuisition
DAQ	Data Acquisition system
DARM	Differential Arm
DARM	Differential ARM Length
DAS	Double Axicon System
DASWG	Data Analysis Software Working Group
DB	Detection Bench
DBS	Dichroic Beam Splitter
DC	Continuous part of the signal
DC	Direct Current
DC	DC readout coupling
DC	Direct Conversion
DCC	Document Control Center
DCH	Detector Characteristics
DCM	Dead Channel Monitor
DCPD	DC Photo Diode
DCS	Data and Computing Systems
DDS	Direct Digital Synthesizer
DE	Detection
DET	DETEction Subsystem
DetChar	Detector Characterization

LVC Abbreviations and Acronyms

Abbreviation / Acronym	Expansion
DL	Detection Lab
DL	Down Left
DLC	Diamond-Like Carbon
DM	Detector Monitoring
DMRO	Differential Mode Read-Out
DMS	Detector Monitoring System
DMT	Data Monitor Tool
DOF	Degree(s) Of Freedom
DOP	Detector OPeration
DQ	Data Quality
DQR	Data Quality Report
DQSEGDB	Data Quality SEGments Data Base
DR	Down Right
DRR	Design Requirements Review
DS	Data Segment
DSP	Digital Signal Processing
DST	Dust monitors
DT	Detection Tower
DTCHR	DeTector CHaRacterization
DTM	Differential Test Mass
DTT	Diagnostics Tools
E#	Engineering Run # (e.g. E4 is Engineering Run 4): the period before Science runs in which intense commissioning on detectors is undertaken, in order to improve
E2E	End-To-End modelling (interferometer simulation)
EB	End Building
EDB	External Detection Bench
EDL	Electronic Detection Laboratory
EE	Electronic Equipment
EGO	European Gravitational Observatory
EIB	External Injection Bench
EIB	Laser Injection Bench
EIB-SAS	External Injection Bench-Seismic Attenuation System
EIB#	External Injection Bench number #
Elog	Electronic Logbook
EM	End Mirror, for the arm cavities
EM	Electro Magnetic
EMC	ElectroMagnetic Compatibility
EMI	ElectroMagnetic Interference
END	IMC END-mirror
ENEB#	External North End Bench number #
ENS	ElectroNics and Software
ENV	ENVironmental monitoring system
EO	Electro-Optical
EOB	Effective One-Body

LVC Abbreviations and Acronyms

Abbreviation / Acronym	Expansion
EOBNR	Effective One-Body from Numerical Relativity
EOM	Electro-Optic Modulator
EPI	External Pre-Isolator
EPICS	Experimental Physics and Industrial Control System: the computer system used to control operation of the LIGO detectors
EPR	Einstein-Podolsky-Rosen
EPRB#	External Power Recycling Pickoff Bench number #
EQ	EarthQuake
ERD	Effective Ringdown frequency
ERR	Error
ESD	Electro-static Discharge
ESIB	External Squeezer and Injection Bench
ESQB	External SQueuezer Bench
ETF	Engineering Test Facility
ETG	Event Trigger Generator
ethinca	Elliptical Thinking Inspiral Coincidence Analysis: method by which multiple-IFO time-coincident triggers are analysed in parameter-space
ETM	End Test Mass
ETM	End Test Mass
ETMX	End Test Mass, X arm
ETMY	End Test Mass, Y arm
EX	End station, X arm
EXC	Excitation
EXCAVATOR	Algorithm for finding correlations between triggers and the value of an auxiliary channel
EXC_DAQ	Excitation readback
EXT	EXTernal
EY	End station, Y arm
f	frequency
F	Frequency
F#	Filter number #
F0	First Filter of the Suspension chain
F7	Filter 7
FAC	Facility Modifications
FAP	False Alarm Probability: a statistic used to rank detection candidates against the background events
FAR	False Alarm Rate: a statistic used to rank detection candidates against the background events
Fbf	Fast Frame Builder
Fbm	Main Frame Builder
FBM	main Frame Builder (Frame Builder, Main)
Fbs	Slow Frame Builder
FBS	slow Frame Builder (Frame Builder, Slow)

LVC Abbreviations and Acronyms

Abbreviation / Acronym	Expansion
Fd	Frame distribution
FDR	Final Design Review
FDS	Frequency Dependent Squeezing
FEA	Finite Element Analysis
FF	Far-Field
FFh	Far Field horizontal
FFL	Frame File List
FFT	Fast (Discrete) Fourier Transform
FFv	Far Field vertical
FI	Faraday Isolator
FIFO	First In First Out
FINE	Fine actuator: used to provide precise feedback/forward motion to the IFO optics
FIR	Finite Impulse Response
FIS	Frequency Independent Squeezer
Flux	air Flux in HVAC system
FOM	Figure Of Merit
FOM1	Figure Of Merit 1
FM	Folding Mirror: optic used to turn a beam in the IFO
FMCS	Facility Management Control System
Fmod	Frequency of modulation
FMX	Folding Mirror, X arm: optic used to turn the H2 input beam into the main X-arm beam tube
FMY	Folding Mirror, Y arm: optic used to turn the H2 input beam into the main y-arm beam tube
FP	Fabry-Perot
FPGA	Field-Programmable Gate Array
FRD	Fundamental Ringdown frequency
FREQ	FREQuency
FSR	Free Spectral Range
FSS	Frequency Stabilisation Servo: used to control the output frequency of the PSL
FTE	Full Time Equivalent
GAIN	Gain
GASF	Geometrical Anti-Spring Filter
GALVO	GALVANometer
GAS	Geometric Anti-Springs
Gc	Global control
GCN	Gamma-ray burst Circular Network
GDS	Global diagnostics system
GEO	British-German Cooperation for Gravity Wave Experiment
GFAL	Grid File Access Library
GIPC	Global Inverted Pendulum Control

LVC Abbreviations and Acronyms

Abbreviation / Acronym	Expansion
GLMN	GLitchMon
GLUE	Grid LSC User Environment
GMST	Greenwich Mean Sidereal Time
GN2	Gaseous Nitrogen
GO	General Optics
GPS	Global Positioning System
GPU	Graphical Processing Unit
GR	Gravitational
GraceDB	Gr avitational wave candidate event DataBase
GRB	Gamma-Ray Burst
GUI	Graphical User Interface
GW	Gravitational Waves
GW	Gravitational Wave signal port
GWDAAW	Gravitational Wave Data Analysis Workshop
GWIC	Gravitational Wave International Committee
Gx	Galaxy Server
h	horizontal
HAM	Horizontal Access Module: small vacuum chamber encasing auxiliary optics mounted on tables
HED	Higher EDucation
HEPI	Hydraulic External Pre-Isolator: passive isolation system external to vacuum chambers
HF	High Frequency
HLTS	HAM Large Triple Suspension
HLV	Hanford-Livingston-Virgo detector network
HLVK	Hanford-Livingston-Virgo-Kagra detector network
HOFT	H of T
HOM	High Order Mode
HP	High Power
HPBD	High Power Beam Dump
HPIO	High Power Input Optics
HPSS	High Performance Storage System (IBM)
HR	High Reflectivity
Hrec	h reconstruction
HSF	High Spatial Frequency
HSTS	HAM Small Triple Suspension
HU	Humidity
HV	High Vacuum
HVAC	Heating, Ventilation and Air Conditioning
HVeto	Heirarchical Veto: analysis of time-coincident triggers between auxiliary channels and gravitational wave channel
HWII	HardWare Inventory and Installation database
HWP	Half Wave Plate
HWS	Hartmann Wavefront Sensor

LVC Abbreviations and Acronyms

Abbreviation / Acronym	Expansion
I	Intensity or In-phase signal
I	In-phase component of demodulated signals
I2C	Inter Integrated Circuit
IAS	Initial Alignment System
IB	Injection Bench
IB	Input Beam
IB1	Input Beam PZT 1
IB2	Input Beam PZT 2
IBJM	Input Beam Jitter Monitoring
IBMS	Input Beam Monitoring System
ID	Inertial Damping
IFAR	Inverse False Alarm Rate
IFI	Input Faraday Isolator
IFO	Interferometer
IGWD	Interferometric Gravitational Wave Detector
IIR	Infinite Impulse Response
IM	Input Mirror
IMAC	Infrastructure and air conditioning
IMBHB	Intermediate Mass Black Hole Binary
IMC	Input Mode Cleaner
IME	Infrastructure Modifications for Environmental noise reduction
IMMS	Infrastructure Machine Monitoring System
IMPAN	small computing cluster at Institute of Mathematics, Poland
IMR	Inspiral-Merger-Ringdown
IN2P3	Institut National de Physique Nucléaire et de Physique des Particules
IN	Input
inca	Inspiral Coincidence Analysis
INF	INFrastructure subsystem
INFN	Istituto Nazionale di Fisica Nucleare
INJ	INjection subsystem
INS	INStrumental
INS	Installation
INSA	French National Institute for Applied Science
IOC	Input Output Computer
IOO	Input Optics
IP	Inverted Pendulum
IPC	Input Power Control
IPS	Interruptible Power Supply
IPSCB	Voltmeter on IPS power line, in DAQ room
IRIG-B	Inter-Range Instrumentation Group type B

LVC Abbreviations and Acronyms

Abbreviation / Acronym	Expansion
ISC	Interferometer Sensing and Control
ISCO	Innermost Stable Circular Orbit
ISCT	Interferometer Sensing and Control Table
ISI	Internal Seismic Isolation: in-vacuum isolation
ISS	Intensity Stabilization Servo
ISYS	Injection SYStem
IT	Information Technology
IT	Injection Tower
ITF	InTerFerometer
ITM	Input Test Mass
ITMX	Input Test Mass, X arm
ITMY	Input Test Mass, Y arm
IVC	Intermediate Vacuum Chamber
kpc	Kiloparsec
KTF	potassium terbium fluoride
KW	Kleine-Welle: excess power trigger generation algorithm, run online in low-latency on the gravitational wave and auxiliary channels
L	Length
L2	Quad Reaction Chain
LA	Lock Acquisition: method by which resonance is achieved and maintained within the full IFO
La	Laser
LAL	LIGO Algorithm Library
LALApps	LIGO Algorithm Library Applications
LAR	Laser Atrium Room
LAS	LASer
LAS	Lock Acquisition System
LASTI	LIGO Advanced System Test Interferometer
LB	Large Baffle
LB	Laser Bench
LC	Local Control
LDAS	LIGO Data Analysis System
LDB	LIGO Data Base
LDG	LIGO Data Grid
LDR	LIGO Data Replicator
LEA	Laser Enclosure Area
LED	Light-Emitting Diode
Lhe	Liquid Helium
LHO	LIGO Hanford Observatory
Li	Spectral line injected on suspension lower stage
LIGO	Laser Interferometer Gravitational-wave Observatory

LVC Abbreviations and Acronyms

Abbreviation / Acronym	Expansion
LISA	Laser Interferometer Space Antenna: future space-borne gravitational wave observatory
LL	Laser Lab
LL	Lower-Left
Llab	Laser laboratory
LLO	LIGO Livingston Observatory
LLR	Laser-Lab Room
LMA	Laboratoire des Matériaux Avancés
LMR	Laser Minitower Room
LMXB	Low-Mass X-Ray Binary
LN2	Liquid Nitrogen
LO	Local Oscillator
LR	Lower-Right
LRD	Lorentzian Ringdown frequency
LSC	LIGO Scientific Collaboration
LSC	Length Sensing and Control
LSC	Length Sensing and Control
LSF	Low Spatial Frequency
LV	LSC-Virgo
LVC	LIGO-VIRGO Collaboration
LVDS	Low Voltage Differential Signal
LVDT	Linear Variable Differential Transducer
LVEA	Laser and Vacuum Equipment Area (at observatory corner station)
LVEA1	Laser and Vacuum Equipment Area (at observatory corner station), 4K interferometer
LVEA2	Laser and Vacuum Equipment Area (at observatory corner station), 2K interferometer
LVK	LIGO-Virgo-KAGRA collaboration
LZH	Laser Zentrum Hannover
M1h	Mirror 1 horizontal motion
M1v	Mirror 1 vertical motion
MA	Magnetic probe
MAG	MAGnetometer
MAR	MARionetta
MBTA	Multi-Band Template Analysis
MC	Mode Cleaner
MC1	Mode Cleaner input mirror
MC2	Mode Cleaner output mirror
MC3	Mode Cleaner third mirror
MCB	Mode Cleaner Building
MDC	Mock Data Challenge
MEDM	Motifs Editor and Display Manager
MEPI	Magnetic External Pre-Isolator
METEO	weather station, METEOrological station
MFe	Mirror Far east (end-X mass)

LVC Abbreviations and Acronyms

Abbreviation / Acronym	Expansion
MFLOPS	Million Floating-point Operations Per Second
MFn	Mirror Far north (end-Y mass)
MGASF	Monolithic Geometrical Anti-Spring Filter
MIC	MICrophone
MICH	short MIChelson interferometer
MICH	Michelson
MIMO	Multiple Input, Multiple Output
MIR	MIRror
MISC	Miscellaneous
MIX	MIXing thing, in the HVAC
ML	Master Laser
MMT	Mode Matching Telescope
MMT1	Mode Matching Telescope mirror 1
MMT2	Mode Matching Telescope mirror 2
MMT3	Mode Matching Telescope mirror 3
MOD	Modulator
MOD	RF Modulation signal generators
Mon	Monitoring point
MOPA	Master Oscillator-Power Amplifier
MOU	Memorandum Of Understanding
Mpc	Megaparsec
MPI	Message Passing Interface
MRE	Major Research Equipment
MSC	Mirror Suspension Control
MSPS	Mega-Samples Per Second
MSRC	Marginally Stable Recycling Cavities
MTBF	Mean Time Before Failure
MX	Mid station, X arm
MY	Mid station, Y arm
N2	North tube section 2
NAP	Noise Analysis Package
NBI	Neutron star Binary Inspiral
NDS	Network Data Server
NDPF	collection of services for high-throughput data processing at Nikhef
NDRC	Non-Degenerate Recycling Cavity
NE	North End
NEB	North End Bench
NEBD	North End Building
NEDB	North End Detection Bench
NF	Near Field
NI	North Input
NIKHEF	Dutch National Institute for Subatomic Physics
NM	Noise Monitor
NMAPI	Noise Monitor Application Programming Interface

LVC Abbreviations and Acronyms

Abbreviation / Acronym	Expansion
NN	Newtonian Noise
NoEMi	N oise frequency E vent M iner
NonNA	N on-linear N oise A nalysis
NORM	NORMalized
NPRO	Non-Planar Ring Oscillator
NS	Neutron Star
NSPOB	Normalised Side-band Pick Off from Beam-splitter
NTP	Network Time Protocol
OB	(suspended) Output Bench
OFI	Output Faraday Isolator
OFS	Offset
OL	Optical Lever
OLTF	Open Loop Transfer Function
OMC	Output Mode Cleaner
OMC-MMT	Output Mode Cleaner Mode Matching Telescope
Omicron	not an acronym, 15th letter of the Greek alphabet
ONASYS	Online Analysis System
Oo	Output optics
OOP	Object-Oriented Programming
OPA	Optical Parametric Amplifier
OPC	OPTical Characterization
OPD	Optical Path Difference
OPL	Optical Path Length
OPLL	Optical Phase Locked Loop
OPLEV	Optical Lever
OPO	Optical Parametric Oscillator
OPT	OPTics
OSB	Operations Support Building
OSD	Optical Simulation and Design subsystem
OSEM	Optical Shadow sensor and Magnetic actuator
OUT	OUTreach
OUT	Output
P	Pitch or Pressure
PAC	Program Advisory Committee
PAY	PAYload subsystem
PBS	Polarizer Beam Splitter
PC	Pockels Cell
Pcal	Photon calibrator
PCART	PEM Cart
PCle	PCI-express
PCI-X	PCI-eXtended
PD	Photodiode

LVC Abbreviations and Acronyms

Abbreviation / Acronym	Expansion
PDH	Pound-Drever-Hall
PDR	Preliminary Design Review
PDRR	Preliminary Design Requirements Review
PDT	Photodetector
PE	cold cathode
PEM	Physical Environment Monitor
PHASE	Phase
PI	Picomotor
PI	Pirani
PI	Parametric Instability
PLC	Programmable Logic Controller
PLL	Phase Locked Loop
PM	Project Management
PMC	Pre-Mode Cleaner
PMP	Project Management Plan
PO	Pick-Off
POB	Pick-Off side-Band
POBS	Pick-Off, ghost beam of Beam-Splitter
POL	Polarized beam
POP	PickOff Plate
POSD	Position Sensing Device
POT	PickOff Telescope
POUT	PEM Outside area
POX	Pick-Off, ghost beam of ITMX
POY	Pick-Off, ghost beam of ITMY
PPKTP	Periodically Poled KTP
Ppm	Parts per million
PPS	Pulse Per Second
Pr	Photo-diode read-out
PR	Power Recycling
PRC	Power Recycling Cavity
PRCL	Power Recycling Cavity Length
PRES	PRESsure
PRM	Power Recycling Mirror
PRNE	Pressure in North End tower
PSD	Power Spectral Density
PSD	Position Sensing Device
PSDf	Position Sensing Device
PSDi	Position Sensing Device
PSDm	Position Sensing Device
PSDt	Position Sensing Device
PSL	Pre-Stabilized Laser
PSL1	Prestabilized Laser enclosure, 4K

LVC Abbreviations and Acronyms

Abbreviation / Acronym	Expansion
PSL2	Prestabilized Laser enclosure, 2K
PSS	Periodic Source Search
PSTAB	Power stabilization
PTF	Physical Template Families
PUM	PenUltimate Mass
PV	Peak-to-Valley
PWR	Power stabilization
PyCBC	Python for CBC
PZT	PieZo-electric Transducer
Q	Quad-phase signal
Q	Quadrature-phase component of demodulated signals
Qa	Quadrant photodiode for alignment
Qc	Detector monitoring and data quality
QD	Quadrant Detector
QND	Quantum Non-Demolition
QNT	Quantum Noise reducTion
QPD	Quadrant PhotoDiode
QPDx	Quadrant monitor Photodiode, X arm
QPDy	Quadrant monitor Photodiode, Y arm
QRPN	Quantum Radiation Pressure Noise
QSN	Quantum Shot Noise
R	Rotation
RA	Right Ascension
RAIN	Rain
RBS	?
RC	Recycling Cavity
RDA	Raw Data Archiving
RDS	Reduced Data Set
REFCAV	ReFERENCE Cavity
REFL	Reflection port
REFL	REFlection
RESP	RESPonsibilities in collaboration
REU	Research Experience for Undergraduates
RF	Radio Frequency
RFC	ReFERENCE Cavity
RFCRef	ReFERENCE Cavity Reflected beam
RFP	Request For Proposal
RGA	Residual Gas Analyzer
RH	Relative Humidity
RH	Ring Heater
RIN	Relative Intensity Noise
RM	Recycling Mirror
RM	Reference Mass

LVC Abbreviations and Acronyms

Abbreviation / Acronym	Expansion
RMS	Root Mean Square
RoC	Radius of Curvature
RODA	Record of Decision Agreement
RSE	Resonant Sideband Extraction
RSE	Resonant Sideband Extraction
RTL	Round Trip Losses
RTP	Rubidium Tytanil Phosphate
RTPC	Real-Time PC
S#	Science run # (e.g. S6 is Science Run 6)
SA	Super Attenuator
Sa	Super attenuator
SAFE	SuperAttenuator Facility at EGO
SAP	Sapphire Core Optics
SAS	Seismic Attenuation System
SAS	Special Airlock System
SAT	SuperATtenuator subsystem
SATCS	SuperATtenuator Control System
SB	Stochastic Background
SBE	Suspended BEnches subsystem
SBL	Single BLock data format
Sc	Suspension control
SCADA	Supervisory Control And Data Acquisition
SDB	Suspended Detection Bench
SDB1	Suspended Detection Bench 1
SDB2	Suspended Detection Bench 2
SE	Seismic probe
SEI	SEismic isolation and suspensions
SEI	Seismic isolation
SEIS	SEISmometer
Seismon	Seismic monitor
SEM	Secondary Emission Monitor
SER	SERial data
SF	Standard Filter
SFI	Squeezer Faraday Isolator
SFP	Small Form factor Pluggable
SFP	Scanning Fabry-Perot optical device
SFT	Soft Fourier Transform
SGWB	Stochastic Gravitational-Wave Background
SHG	Second Harmonic Generator
SIB	Suspended Injection Bench
SIB1	Suspended Injection Bench 1
SIB2	Suspended Injection Bench 2
SiC	Silicon Carbide

LVC Abbreviations and Acronyms

Abbreviation / Acronym	Expansion
SIDE	Side OSEM sensor
SILeNte	S ystem I dentification L inear e t N onlinear T echniques
SIOM	Shanghai Institute of Optical Materials
SIRE	Single Inspirial Reader
SISO	Single Input Single Output
SL	Slave Laser
SLC	Stray Light Control
SLC	Stray Light Control subsystem
SLED	Superluminescent Diode (Super LED)
SM	Single-Mode
SM	Science Mode
SM1	Steering Mirror 1
SM2	Steering Mirror 2
SM3	Steering Mirror 3
SMA	SubMiniature version A connector
SMS	Slow Monitoring Station
SNEB	Suspended North End Bench
SNC	interferometer SeNsing and Control
SNR	Signal to Noise Ratio
SNR	Signal-to-Noise Ratio
SNSM	SenseMon
SOS	Small Optics Suspension
SPD	SPeeD
SPK	SPoKespersion
SPL	Sound Pressure Level
SPOB	Sideband Picked-Off at Beam-splitter
SPR	Software Problem Report
SPRB	Suspended Power Recycling pickoff Bench
SQB	SQueuezer Board
SQZ	vacuum SQueueZing
SR	Signal Recycling
SRC	Signal Recycling Cavity
SRCL	Signal Recycling Cavity Length
SRM	Signal Recycling Mirror
SSFS	Second Stage of Frequency Stabilization
SSO	Single Sign On
Stol	Raw data storage
STAMP	Stochastic Transient Analysis Multi-detector Pipeline
STS	Streckheisen Tri-axial Seismometer

LVC Abbreviations and Acronyms

Abbreviation / Acronym	Expansion
SUM	Sum
SUM	Sum of photodiode currents
SUP	Support Equipment
SURF	Summer Undergraduate Research Foundation
SUS	Suspension
SUS	SUSpension system
SVN	SubVersioN
SW	Switch (of photodiode for locking input signal)
SWEB	Suspended West End Bench
TAMA	Japanese Interferometric Gravitational-Wave Project
TB	Tube
TB	central area Technical Building
TB	Terabytes
TBC	To Be Confirmed
TCC	Tank Central Corner
TCe	Tank Central east
TCMa	Tank Central Mode cleaner a
TCMb	Tank Central Mode cleaner b
TCn	Tank Central north
TCOa	Tank Central Output a
TCP/IP	Transmission Control Protocol/Internet Protocol
TCS	Thermal Compensation System subsystem
TCS	Thermal Compensation System
TDBox	Timing Distribution Box
TDR	Technical Design Report
TDS	Technical Documentation System
TE	TEmpérature
TEC	Thermo-Electric Cooler
TEMP	Temperature
TEMPO	Outdoor Temperature
TF	Transfer Function
TFB	TOLM Frame Builder
TFe	Tank Far east (end-X)
TFn	Tank Far north (end-Y)
TFP	Thin Film Polarizer
TGG	Terbium Gallium Garnet
thinca	Thinking Inspiral Coincidence Analysis
THST	Thunderstorm Monitor
TI	Test Input
TILT	Tiltmeter
TIM	Timing
TIM	TIMing system
TIP	Test Input Pitch
TIS	Total Integrated Scattering

LVC Abbreviations and Acronyms

Abbreviation / Acronym	Expansion
TIY	Test Input Yaw
TM	Technical Manager
TM	Test Mass
TMS	Transmission Monitor System or Suspension
TNI	Thermal Noise Interferometer
TO	Test Output
TO	Tower
To	Tower vacuum system
TOLM	Timing and Optical Link Module
TOLM-PCI	Timing and Optical Link Module, Peripheral Component Interconnect
TOLM-PMC	Timing and Optical Link Module, PCI Mezzanine Card
TOP	Test Output Pitch
TOY	Test Output Yaw
TRA	TRAnsmiSSion
TRANS	Transmitted light
TSP	Titanium Sublimation Pump
TT	Tip Tilt
Tu	Tube vacuum
TX	Theta X
Ty	Theta Y
tz	theta z
UGF	Unitary Gain Frequency
UGF	Unity Gain Frequency
UHV	Ultra High Vacuum
UL	Upper-Left
UL	Upper Limits
UPR	Used Percentage Ratio
UPS	Uninterruptible Power Supply
UPV	Use Percentage Veto
UR	Upper-Right
v	vertical
V	Vertical direction
V	Voltage
V+	Virgo+
VAC	VACuum system
VCO	Voltage Controlled Oscillator
VCS	Virgo Common Software
VDAS	Virgo Data Analysis Software
VDB	Virgo Database

LVC Abbreviations and Acronyms

Abbreviation / Acronym	Expansion
VEA	Vacuum Equipment Area (at observatory mid- and end-stations)
VEB	Virgo Editorial Board
VIC	Virgo Interferometer Channels database
VIM	Virgo Interferometer Monitor
Virgo	not an acronym, sixth constellation of the zodiac
VLAN	Virgo Local Area Network
VME	Versabus Module Eurocard
VRS	Virgo Reference System
VSR#	VIRGO Scientific Run # (e.g. VSR1 is VIRGO Scientific Run 1)
VSR4	Virgo Scientific Run 4
VSRM	Variable Signal Recycling Mirror
W2	West tube section 2
WAB	West Arm Building
WAN	Wide Area Network
WBRF	Wide Band RF receiver
WBS	Work Breakdown Structure
WDIR	Wind Direction
WDF	Wavelet Detection Filter
WE	West End
WEB	West End Bench
WEBD	West End Building
WEDB	West End Detection Bench
WFS	Wave-Front Sensor
WI	West Input
WIND	Wind speed
WNB	White Noise Burst
WNWS	Wind North-South
WT	West Tower
WUI	Web User Interface
x	horizontal motion in the mirror's plane
X	horizontal direction perpendicular to optical axis
y	vertical motion in the mirror's plane