

LVC Abbreviations and Acronyms

Collaboration	Abbreviation / Acronym	Expansion
AdVirgo	AA	Automatic Alignment
	AAAS	American Association for the Advancement of Science
AdVirgo	AC	Acoustic probe
AdVirgo	AC	Alternating Current
	AC	AC readout coupling
	AC	AC signal
AdVirgo	ACA	Actuator CAge
LVC	ACC	ACCelerometer
	ACIGA	Australian Consortium for Interferometric Gravitational Astronomy
AdVirgo	ACL	Algorithms for Control and Locking
	ACWP	Actual Cost of Work Performed
LVC	ADC	Analog-to-Digital Converter
	ADCU	Analogue Data Collection Unit
LVC	ADE	Advanced Detector Era
LIGO	AdL	Please see the preferred acronym "aLIGO"
AdVirgo	AdV	Advanced Virgo
AdVirgo	AdVirgo	Advanced Virgo
AdVirgo	AI	Alignment
	aLIGO	The Advanced LIGO Detector, housed in the LIGO Observatories
	AEI	Albert Einstein Institute
AdVirgo	Alp	Automatic Locking processes signals
AdVirgo	ALP	Automation of the Locking Procedure
AdVirgo	ALS	Auxiliary Laser System
LIGO	ALUK	Advanced LIGO UK Consortium
	AM	Amplitude Modulation
AdVirgo	AMC	Advanced Mezzanine Card
	AMU	Atomic Mass Unit
	ANU	Australian National University
	AOC	Adaptive Optics Compensation
AdVirgo	AOI	Angle Of Incidence
LVC	AOM	Acousto-Optic Modulator
LIGO	AOS	Auxiliary Optics System
	API	Application Programming Interface
LVC	AR	Anti-Reflective
AdVirgo	ARM	Advanced RISC Machine
LIGO	AS	Antisymmetric
LIGO	AS1	Antisymmetric port, PD 1
LIGO	AS2	Antisymmetric port, PD 2
LIGO	AS3	Antisymmetric port, PD 3
LIGO	AS4	Antisymmetric port, PD 4
LVC	ASC	Alignment Sensing and Control
	ATM	Asynchronous Transfer Mode
	ATR	Acceptance Test Report
LIGO	AWG	Arbitrary Wave-form Generator: the system used to inject signals into the interferometer, including injections.
AdVirgo	B#	optical Beam number #
AdVirgo	B1	Beam at dark fringe port, after OMC

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AdVirgo	B1p	Beam at dark fringe port, before OMC
AdVirgo	B1s	Beam at dark fringe port, reflected by OMC
AdVirgo	B2	Beam going back to the laser, between IMC and EOM
AdVirgo	B5	Beam from North arm reflected by second face of BS (beam in PRC)
AdVirgo	B7	Beam in West arm cavity
AdVirgo	B8	Beam in North arm cavity
AdVirgo	BAB	Bright Alugnment Beam
	BBH	Binary Black Hole
AdVirgo	BC	Beam Control
LIGO	BCS	Beam Centering Servo
GEO	BD	Beam Director
AdVirgo	BD	BuilDing
AdVirgo	BDCE	Central Building
AdVirgo	BDNE	North End Building
GEO	BDOMC2	Beam
AdVirgo	BDWE	West End Building
	BH	Black Hole
	BH-BH	Black Hole - Black Hole binary
AdVirgo	BJ	Beam Jitter
LIGO	BLRMS	Band-Limited Root-Mean-Square
AdVirgo	BMS	Beam Monitoring System
AdVirgo	BNS	Binary Neutron Stars
LIGO	BP	Barometric Pressure
AdVirgo	BPC	Beam Pointing Control
LIGO	BPCU	Beam Pointing Control Unit
LIGO	BPO	Barometric Pressure Outside
AdVirgo	BRDF	Bidirectional Reflectance Distribution Function
AdVirgo	BRMSMon	<b>Band Root Mean Square Monitor</b>
AdVirgo	BRS	BuRSt
LIGO	BRST	Burst Monitor
AdVirgo	Bruco	<b>Brute-force coherence</b>
LVC	BS	Beam Splitter
AdVirgo	Bs	Beam source signals (Injection system signals)
LIGO	BSC	Basic Symmetric Chamber: large vacuum chamber enclosing the suspended core optics
AdVirgo	BSD	Band Sampled Data
LIGO	BT	Beam Tube
LIGO	BT1	Beam Tube, y arm, ~30m
LIGO	BT2	Beam Tube, y arm, 500m
LIGO	BT3	Beam Tube, y arm, 1000m
LIGO	BT4	Beam Tube, y arm, 1500m
LIGO	BT5	Beam Tube, y arm, ~1990m
LIGO	BTE	Beam Tube Enclosure
AdVirgo	BUFFALO	Brute-force Utilities For Finding Annoying Lines and Others
AdVirgo	C0	C0 building

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Collaboration	Abbreviation / Acronym	Expansion
AdVirgo	C27	Crate 27 of photodiodes
LIGO	CA	Channel Access
AdVirgo	Ca	Calibration: the process of converting differential arm length changes into h(t)
	CACR	Center for Advanced Computer Research (Caltech)
LIGO	CAL	Calibration: the process of converting differential arm length changes into h(t)
AdVirgo	CAL	CALibrations
AdVirgo	CALVA	CAvites pour le Lock de Virgo Avance
LVC	CARM	Common Arm
AdVirgo	CB	Central Building
	CBC	Compact Binary Coalescence
AdVirgo	CC	Coherent Control
	CC	Computing Center
AdVirgo	CC	Corrective Coating
	CCB	Change Control Board
AdVirgo	CCB	Coherent Control Beam
	CCD	Charged Coupled Device
AdVirgo	CCO	Commissioning COordinator
	CDR	Conceptual Design Review
	CDRL	Contract Data Requirements List
LIGO	CDS	Control and Data acquisition System
AdVirgo	CE	Central Building
AdVirgo	CEB	Central Building
AdVirgo	CHRoCC	Central Heating Radius of Curvature Correction
	CIT	California Institute of Technology
AdVirgo	CITF	Virgo Central INTerferometer
AdVirgo	CMRF	Common Mode Rejection Factor
	CMRR	Common Mode Rejection Ratio
LIGO	CMS	Control and Monitoring System (part of CDS)
AdVirgo	CMT	Configuration Management Tool
	CNRS	Centre National de la Recherche Scientifique
	COAR	Coarse actuator
LIGO	COC	Core Optics Components
LIGO	COIL	Coil current: the signal within the magnetic coils providing excitation to the test masses
AdVirgo	COM	Center Of Mass
AdVirgo	COM	instrumental COMMunication
AdVirgo	COMP	COMPensator
AdVirgo	corr	correction
LIGO	CORR	Correction
LIGO	COS	Core Optics Support
AdVirgo	CP	Compensation Plate
AdVirgo	CR	Coil Relay
AdVirgo	CT	CryoTrap
LIGO	CTM	Common Test Mass

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Collaboration	Abbreviation / Acronym	Expansion
	CVS	Concurrent Version-control System
	CW	Continuous Wave
	cWB	coherent WaveBurst
	DA	Data Analysis
AdVirgo	DAA	Data Analysis and Astronomy
	DAC	Digital-to-Analog Converter
AdVirgo	DACO	Data Analysis COordinator
	DAG	Directed Acyclic Graph
AdVirgo	DAG	Data Analysis Group
AdVirgo	DAQ	Data AcQuisition
LIGO	DAQ	Data Acquisition system
LIGO	DARM	Differential Arm
AdVirgo	DARM	Differential ARM Length
AdVirgo	DAS	Double Axicon System
LVC	DASWG	Data Analysis Software Working Group
AdVirgo	DB	Detection Bench
AdVirgo	DBS	Dichroic Beam Splitter
AdVirgo	DC	Continuous part of the signal
AdVirgo	DC	Direct Current
LIGO	DC	DC readout coupling
LIGO	DC	Direct Conversion
LVC	DCC	Document Control Center
LIGO	DCH	Detector Characteristics
LIGO	DCM	Dead Channel Monitor
LIGO	DCPD	DC Photo Diode
LIGO	DCS	Data and Computing Systems
AdVirgo	DDS	Direct Digital Synthesizer
AdVirgo	DE	Detection
AdVirgo	DET	DETection Subsystem
LVC	DetChar	<b>Detector Characterization</b>
AdVirgo	DL	Detection Lab
AdVirgo	DL	Down Left
AdVirgo	DLC	Diamond-Like Carbon
AdVirgo	DM	Detector Monitoring
	DMRO	Differential Mode Read-Out
AdVirgo	DMS	Detector Monitoring System
LIGO	DMT	Data Monitor Tool
AdVirgo	DOF	Degree(s) Of Freedom
AdVirgo	DOP	Detector OPeration
LVC	DQ	Data Quality
LVC	DQR	Data Quality Report
AdVirgo	DQSEGDB	Data Quality SEGments Data Base
AdVirgo	DR	Down Right
	DRR	Design Requirements Review
LVC	DS	Data Segment

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Collaboration	Abbreviation / Acronym	Expansion
LVC	DSP	Digital Signal Processing
LIGO	DST	Dust monitors
AdVirgo	DT	Detection Tower
AdVirgo	DTCHR	DeTector CHaRacterization
LIGO	DTM	Differential Test Mass
LIGO	DTT	Diagnostics Tools
LIGO	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)
AdVirgo	EB	End Building
AdVirgo	EDB	External Detection Bench
AdVirgo	EDL	Electronic Detection Laboratory
AdVirgo	EE	Electronic Equipment
	EGO	European Gravitational Observatory
AdVirgo	EIB	External Injection Bench
AdVirgo	EIB	Laser Injection Bench
AdVirgo	EIB-SAS	External Injection Bench-Seismic Attenuation System
AdVirgo	EIB#	External Injection Bench number #
AdVirgo	Elog	Electronic Logbook
AdVirgo	EM	End Mirror, for the arm cavities
	EM	Electro Magnetic
AdVirgo	EMC	ElectroMagnetic Compatibility
AdVirgo	EMI	ElectroMagnetic Interference
AdVirgo	END	IMC END-mirror
AdVirgo	ENEB#	External North End Bench number #
AdVirgo	ENS	ElectroNics and Software
AdVirgo	ENV	ENVironmental monitoring system
AdVirgo	EO	Electro-Optical
	EOB	Effective One-Body
	EOBNR	Effective One-Body from Numerical Relativity
LVC	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
AdVirgo	EPRB#	External Power Recycling Pickoff Bench number #
AdVirgo	EQ	EarthQuake
	ERD	Effective Ringdown frequency
LIGO	ERR	Error
	ESD	Electro-static Discharge
AdVirgo	ESIB	External Squeezer and Injection Bench
AdVirgo	ESQB	External SQUEEzer Bench
	ETF	Engineering Test Facility
	ETG	Event Trigger Generator
LVC	ethinca	Elliptical Thinking Inspiral Coincidence Analysis: method by which multiple-IFO time-coincident triggers are analysed in parameter-space

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	ETM	End Test Mass
AdVirgo	ETM	End Test Mass
LIGO	ETMX	End Test Mass, X arm
LIGO	ETMY	End Test Mass, Y arm
LIGO	EX	End station, X arm
LIGO	EXC	Excitation
AdVirgo	EXCAVATOR	Algorithm for finding correlations between triggers and the value of an auxiliary channel
LIGO	EXC_DAQ	Excitation readback
AdVirgo	EXT	EXternal
LIGO	EY	End station, Y arm
AdVirgo	f	frequency
LIGO	F	Frequency
AdVirgo	F#	Filter number #
AdVirgo	F0	First Filter of the Suspension chain
AdVirgo	F7	Filter 7
	FAC	Facility Modifications
LVC	FAP	False Alarm Probability: a statistic used to rank detection candidates against the background events
LVC	FAR	False Alarm Rate: a statistic used to rank detection candidates against the background events
AdVirgo	Fbf	Fast Frame Builder
AdVirgo	Fbm	Main Frame Builder
AdVirgo	FBM	main Frame Builder (Frame Builder, Main)
AdVirgo	Fbs	Slow Frame Builder
AdVirgo	FBS	slow Frame Builder (Frame Builder, Slow)
AdVirgo	Fd	Frame distribution
	FDR	Final Design Review
AdVirgo	FDS	Frequency Dependent Squeezing
AdVirgo	FEA	Finite Element Analysis
AdVirgo	FF	Far-Field
AdVirgo	FFh	Far Field horizontal
AdVirgo	FFL	Frame File List
	FFT	Fast (Discrete) Fourier Transform
AdVirgo	FFv	Far Field vertical
AdVirgo	FI	Faraday Isolator
AdVirgo	FIFO	First In First Out
LIGO	FINE	Fine actuator: used to provide precise feedback/forward motion to the IFO optics
LVC	FIR	Finite Impulse Response
AdVirgo	FIS	Frequency Independent Squeezer
AdVirgo	Flux	air Flux in HVAC system
	FOM	Figure Of Merit
AdVirgo	FOM1	Figure Of Merit 1
LIGO	FM	Folding Mirror: optic used to turn a beam in the IFO
LIGO	FMCS	Facility Management Control System
AdVirgo	Fmod	Frequency of modulation

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Collaboration	Abbreviation / Acronym	Expansion
LIGO	FMX	Folding Mirror, X arm: optic used to turn the H2 input beam into the main X-arm beam tube
LIGO	FMY	Folding Mirror, Y arm: optic used to turn the H2 input beam into the main y-arm beam tube
AdVirgo	FP	Fabry-Perot
AdVirgo	FPGA	Field-Programmable Gate Array
	FRD	Fundamental Ringdown frequency
AdVirgo	FREQ	FREQuency
LVC	FSR	Free Spectral Range
LIGO	FSS	Frequency Stabilisation Servo: used to control the output frequency of the PSL
	FTE	Full Time Equivalent
LIGO	GAIN	Gain
LIGO	GASF	Geometrical Anti-Spring Filter
AdVirgo	GALVO	GALVANometer
AdVirgo	GAS	Geometric Anti-Springs
AdVirgo	Gc	Global control
LVC	GCN	Gamma-ray burst Circular Network
LIGO	GDS	Global diagnostics system
GEO	GEO	British-German Cooperation for Gravity Wave Experiment
AdVirgo	GFAL	Grid File Access Library
AdVirgo	GIPC	Global Inverted Pendulum Control
LIGO	GLMN	GLitchMon
LSC	GLUE	Grid LSC User Environment
	GMST	Greenwich Mean Sidereal Time
AdVirgo	GN2	Gaseous Nitrogen
AdVirgo	GO	General Optics
	GPS	Global Positioning System
	GPU	Graphical Processing Unit
	GR	Gravitational
AdVirgo	GraceDB	<b>Gr</b> avitational wave <b>can</b> didate <b>ev</b> ent <b>Da</b> ta <b>B</b> ase
	GRB	Gamma-Ray Burst
	GUI	Graphical User Interface
AdVirgo	GW	Gravitational Waves
LIGO	GW	Gravitational Wave signal port
	GWDAAW	Gravitational Wave Data Analysis Workshop
	GWIC	Gravitational Wave International Committee
AdVirgo	Gx	Galaxy Server
AdVirgo	h	horizontal
LIGO	HAM	Horizontal Access Module: small vacuum chamber encasing auxiliary optics mounted on tables
	HED	Higher EDucation
LIGO	HEPI	Hydraulic External Pre-Isolator: passive isolation system external to vacuum chambers
	HF	High Frequency
LIGO	HLTS	HAM Large Triple Suspension
AdVirgo	HOFT	H OF T

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AdVirgo	HOM	High Order Mode
AdVirgo	HP	High Power
AdVirgo	HPBD	High Power Beam Dump
AdVirgo	HPIO	High Power Input Optics
	HPSS	High Performance Storage System (IBM)
AdVirgo	HR	High Reflectivity
AdVirgo	Hrec	h reconstruction
AdVirgo	HSF	High Spatial Frequency
LIGO	HSTS	HAM Small Triple Suspension
AdVirgo	HU	Humidity
AdVirgo	HV	High Vacuum
LVC	HVAC	Heating, Ventilation and Air Conditioning
LVC	HVeto	Heirarchical Veto: analysis of time-coincident triggers between auxiliary channels and gravitational wave channel
AdVirgo	HWII	HardWare Inventory and Installation database
AdVirgo	HWP	Half Wave Plate
AdVirgo	HWS	Hartmann Wavefront Sensor
LIGO	I	Intensity or In-phase signal
AdVirgo	I	In-phase component of demodulated signals
AdVirgo	I2C	Inter Integrated Circuit
LIGO	IAS	Initial Alignment System
AdVirgo	IB	Injection Bench
LIGO	IB	Input Beam
LIGO	IB1	Input Beam PZT 1
LIGO	IB2	Input Beam PZT 2
AdVirgo	IBJM	Input Beam Jitter Monitoring
AdVirgo	IBMS	Input Beam Monitoring System
AdVirgo	ID	Inertial Damping
LVC	IFAR	Inverse False Alarm Rate
LIGO	IFI	Input Faraday Isolator
LIGO	IFO	Interferometer
AdVirgo	IGWD	Interferometric Gravitational Wave Detector
LIGO	IIR	Infinite Impulse Response
AdVirgo	IM	Input Mirror
AdVirgo	IMAC	Infrastructure and air conditioning
AdVirgo	IMBHB	Intermediate Mass Black Hole Binary
AdVirgo	IMC	Input Mode Cleaner
AdVirgo	IME	Infrastructure Modifications for Environmental noise reduction
AdVirgo	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
LIGO	IN	Input
LVC	inca	Inspiral Coincidence Analysis
AdVirgo	INF	INFrastructure subsystem
	INFN	Istituto Nazionale di Fisica Nucleare



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AdVirgo	INJ	INJection subsystem
AdVirgo	INS	INStrumental
LIGO	INS	Installation
	INSA	French National Institute for Applied Science
LIGo	IOC	Input Output Computer
LIGO	IOO	Input Optics
LVC	IP	Inverted Pendulum
AdVirgo	IPC	Input Power Control
AdVirgo	IPS	Interruptible Power Supply
AdVirgo	IPSCB	Voltmeter on IPS power line, in DAQ room
AdVirgo	IRIG-B	Inter-Range Instrumentation Group type B
LVC	ISC	Interferometer Sensing and Control
	ISCO	Innermost Stable Circular Orbit
LIGO	ISCT	Interferometer Sensing and Control Table
LIGO	ISI	Internal Seismic Isolation: in-vacuum isolation
LIGO	ISS	Intensity Stabilization Servo
AdVirgo	ISYS	Injection SYStem
	IT	Information Technology
AdVirgo	IT	Injection Tower
AdVirgo	ITF	InTerFerometer
LVC	ITM	Input Test Mass
LIGO	ITMX	Input Test Mass, X arm
LIGO	ITMY	Input Test Mass, Y arm
AdVirgo	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
LIGO	L	Length
LIGO	L2	Quad Reaction Chain
LIGO	LA	Lock Acquisition: method by which resonance is achieved and maintained within the full IFO
AdVirgo	La	Laser
LIGO	LAL	LIGO Algorithm Library
LIGO	LALApps	LIGO Algorithm Library Applications
AdVirgo	LAR	Laser Atrium Room
AdVirgo	LAS	LASer
LIGO	LAS	Lock Acquisition System
LIGO	LASTI	LIGO Advanced System Test Interferometer
AdVirgo	LB	Large Baffle
AdVirgo	LB	Laser Bench
AdVirgo	LC	Local Control
	LDAS	LIGO Data Analysis System

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	LDB	LIGO Data Base
	LDG	LIGO Data Grid
	LDR	LIGO Data Replicator
LIGO	LEA	Laser Enclosure Area
AdVirgo	LED	Light-Emitting Diode
AdVirgo	Lhe	Liquid Helium
	LHO	LIGO Hanford Observatory
AdVirgo	Li	Spectral line injected on suspension lower stage
	LIGO	Laser Interferometer Gravitational-wave Observatory
	LISA	Laser Interferometer Space Antenna: future space-borne gravitational wave observatory
AdVirgo	LL	Laser Lab
LIGO	LL	Lower-Left
AdVirgo	Llab	Laser laboratory
	LLO	LIGO Livingston Observatory
AdVirgo	LLR	Laser-Lab Room
AdVirgo	LMA	Laboratoire des Matériaux Avancés
AdVirgo	LMR	Laser Minitower Room
	LMXB	Low-Mass X-Ray Binary
AdVirgo	LN2	Liquid Nitrogen
LIGO	LO	Local Oscillator
LIGO	LR	Lower-Right
	LRD	Lorentzian Ringdown frequency
	LSC	LIGO Scientific Collaboration
LIGO	LSC	Length Sensing and Control
AdVirgo	LSC	Length Sensing and Control
AdVirgo	LSF	Low Spatial Frequency
AdVirgo	LV	LSC-Virgo
	LVC	LIGO-VIRGO Collaboration
AdVirgo	LVDS	Low Voltage Differential Signal
	LVDT	Linear Variable Differential Transducer
LIGO	LVEA	Laser and Vacuum Equipment Area (at observatory corner station)
LIGO	LVEA1	Laser and Vacuum Equipment Area (at observatory corner station), 4K interferometer
LIGO	LVEA2	Laser and Vacuum Equipment Area (at observatory corner station), 2K interferometer
LVK	LVK	LIGO-Virgo-KAGRA collaboration
	LZH	Laser Zentrum Hannover
AdVirgo	M1h	Mirror 1 horizontal motion
AdVirgo	M1v	Mirror 1 vertical motion
AdVirgo	MA	Magnetic probe
AdVirgo	MAG	MAGnetometer
AdVirgo	MAR	MARionetta
	MBTA	Multi-Band Template Analysis
LVC	MC	Mode Cleaner
LIGO	MC1	Mode Cleaner input mirror
LIGO	MC2	Mode Cleaner output mirror
LIGO	MC3	Mode Cleaner third mirror
AdVirgo	MCB	Mode Cleaner Building

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

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AdVirgo	NM	Noise Monitor
AdVirgo	NMAPI	Noise Monitor Application Programming Interface
AdVirgo	NN	Newtonian Noise
AdVirgo	NoEMi	<b>No</b> ise frequency <b>E</b> vent <b>M</b> iner
AdVirgo	NonNA	<b>Non</b> -linear <b>No</b> ise <b>A</b> nalysis
AdVirgo	NORM	NORMalized
LIGO	NPRO	Non-Planar Ring Oscillator
	NS	Neutron Star
LIGO	NSPOB	Normalised Side-band Pick Off from Beam-splitter
AdVirgo	NTP	Network Time Protocol
AdVirgo	OB	(suspended) Output Bench
AdVirgo	OFI	Output Faraday Isolator
LIGO	OFS	Offset
AdVirgo	OL	Optical Lever
AdVirgo	OLTF	Open Loop Transfer Function
LVC	OMC	Output Mode Cleaner
AdVirgo	OMC-MMT	Output Mode Cleaner Mode Matching Telescope
AdVirgo	Omicron	not an acronym, 15th letter of the Greek alphabet
	ONASYS	Online Analysis System
AdVirgo	Oo	Output optics
LIGO	OOP	Object-Oriented Programming
AdVirgo	OPA	Optical Parametric Amplifier
AdVirgo	OPC	OPTical Characterization
	OPD	Optical Path Difference
AdVirgo	OPL	Optical Path Length
AdVirgo	OPLL	Optical Phase Locked Loop
LIGO	OPLEV	Optical Lever
AdVirgo	OPO	Optical Parametric Oscillator
AdVirgo	OPT	OPTics
	OSB	Operations Support Building
AdVirgo	OSD	Optical Simulation and Design subsystem
LIGO	OSEM	Optical Shadow sensor and Magnetic actuator
AdVirgo	OUT	OUTreach
LIGO	OUT	Output
LIGO	P	Pitch or Pressure
	PAC	Program Advisory Committee
AdVirgo	PAY	PAYload subsystem
AdVirgo	PBS	Polarizer Beam Splitter
LIGO	PC	Pockels Cell
AdVirgo	Pcal	Photon calibrator
LIGO	PCART	PEM Cart
AdVirgo	PCie	PCI-express
AdVirgo	PCI-X	PCI-eXtended
LVC	PD	Photodiode
AdVirgo	PDH	Pound-Drever-Hall

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	PDR	Preliminary Design Review
	PDRR	Preliminary Design Requirements Review
	PDT	Photodetector
AdVirgo	PE	cold cathode
LIGO	PEM	Physical Environment Monitor
LIGO	PHASE	Phase
AdVirgo	PI	Picomotor
AdVirgo	PI	Pirani
LIGO	PI	Parametric Instability
AdVirgo	PLC	Programmable Logic Controller
AdVirgo	PLL	Phase Locked Loop
	PM	Project Management
LVC	PMC	Pre-Mode Cleaner
	PMP	Project Management Plan
LVC	PO	Pick-Off
LIGO	POB	Pick-Off side-Band
LIGO	POBS	Pick-Off, ghost beam of Beam-Splitter
AdVirgo	POL	Polarized beam
AdVirgo	POP	PickOff Plate
AdVirgo	POSD	Position Sensing Device
AdVirgo	POT	PickOff Telescope
LIGO	POUT	PEM Outside area
LIGO	POX	Pick-Off, ghost beam of ITMX
LIGO	POY	Pick-Off, ghost beam of ITMY
AdVirgo	PPKTP	Periodically Poled KTP
	Ppm	Parts per million
AdVirgo	PPS	Pulse Per Second
AdVirgo	Pr	Photo-diode read-out
AdVirgo	PR	Power Recycling
LVC	PRC	Power Recycling Cavity
AdVirgo	PRCL	Power Recycling Cavity Length
AdVirgo	PRES	PRESsure
AdVirgo	PRM	Power Recycling Mirror
AdVirgo	PRNE	Pressure in North End tower
	PSD	Power Spectral Density
AdVirgo	PSD	Position Sensing Device
AdVirgo	PSDf	Position Sensing Device
AdVirgo	PSDi	Position Sensing Device
AdVirgo	PSDm	Position Sensing Device
AdVirgo	PSDt	Position Sensing Device
LVC	PSL	Pre-Stabilized Laser
LIGO	PSL1	Prestabilized Laser enclosure, 4K
LIGO	PSL2	Prestabilized Laser enclosure, 2K
AdVirgo	PSS	Periodic Source Search
AdVirgo	PSTAB	Power stabilization
	PTF	Physical Template Families
LIGO	PUM	PenUltimate Mass

LVC Abbreviations and Acronyms

Collaboration	Abbreviation / Acronym	Expansion
AdVirgo	PV	Peak-to-Valley
LIGO	PWR	Power stabilization
AdVirgo	PyCBC	Python for CBC
LVC	PZT	PieZo-electric Transducer
LIGO	Q	Quad-phase signal
AdVirgo	Q	Quadrature-phase component of demodulated signals
AdVirgo	Qa	Quadrant photodiode for alignment
AdVirgo	Qc	Detector monitoring and data quality
AdVirgo	QD	Quadrant Detector
	QND	Quantum Non-Demolition
AdVirgo	QNT	Quantum Noise reducTion
	QPD	Quadrant PhotoDiode
LIGO	QPDx	Quadrant monitor Photodiode, X arm
LIGO	QPDy	Quadrant monitor Photodiode, Y arm
AdVirgo	QRPN	Quantum Radiation Pressure Noise
AdVirgo	QSN	Quantum Shot Noise
LIGO	R	Rotation
	RA	Right Ascension
LIGO	RAIN	Rain
LIGO	RBS	?
LVC	RC	Recycling Cavity
	RDA	Raw Data Archiving
LIGO	RDS	Reduced Data Set
LIGO	REFCAV	Reference Cavity
LIGO	REFL	Reflection port
AdVirgo	REFL	REFlection
AdVirgo	RESP	RESPonsibilities in collaboration
	REU	Research Experience for Undergraduates
LVC	RF	Radio Frequency
AdVirgo	RFC	ReFERENCE Cavity
AdVirgo	RFCRef	ReFERENCE Cavity Reflected beam
	RFP	Request For Proposal
LVC	RGA	Residual Gas Analyzer
LIGO	RH	Relative Humidity
AdVirgo	RH	Ring Heater
AdVirgo	RIN	Relative Intensity Noise
LIGO	RM	Recycling Mirror
AdVirgo	RM	Reference Mass
	RMS	Root Mean Square
AdVirgo	RoC	Radius of Curvature
	RSE	Resonant Sideband Extraction
AdVirgo	RSE	Resonant Sideband Extraction
AdVirgo	RTL	Round Trip Losses
AdVirgo	RTP	Rubidium Tytanil Phosphate
AdVirgo	RTPC	Real-Time PC
LIGO	S#	Science run # (e.g. S6 is Science Run 6)
AdVirgo	SA	Super Attenuator

LVC Abbreviations and Acronyms

Collaboration	Abbreviation / Acronym	Expansion
AdVirgo	Sa	Super attenuator
AdVirgo	SAFE	SuperAttenuator Facility at EGO
	SAP	Sapphire Core Optics
	SAS	Seismic Attenuation System
AdVirgo	SAS	Special Airlock System
AdVirgo	SAT	SuperATtenuator subsystem
AdVirgo	SATCS	SuperATtenuator Control System
AdVirgo	SB	Stochastic Background
AdVirgo	SBE	Suspended BEnches subsystem
AdVirgo	SBL	Single BLock data format
AdVirgo	Sc	Suspension control
AdVirgo	SCADA	Supervisory Control And Data Acquisition
AdVirgo	SDB	Suspended Detection Bench
AdVirgo	SDB1	Suspended Detection Bench 1
AdVirgo	SDB2	Suspended Detection Bench 2
AdVirgo	SE	Seismic probe
AdVirgo	SEI	SEIsmic isolation and suspensions
LIGO	SEI	Seismic isolation
LVC	SEIS	SEISmometer
AdVirgo	Seismon	<b>Seismic monitor</b>
	SEM	Secondary Emission Monitor
AdVirgo	SER	SERial data
AdVirgo	SF	Standard Filter
AdVirgo	SFI	Squeezer Faraday Isolator
AdVirgo	SFP	Small Form factor Pluggable
AdVirgo	SFP	Scanning Fabry-Perot optical device
AdVirgo	SFT	Soft Fourier Transform
AdVirgo	SGWB	Stochastic Gravitational-Wave Background
LIGO	SHG	Second Harmonic Generator
AdVirgo	SIB	Suspended Injection Bench
AdVirgo	SIB1	Suspended Injection Bench 1
AdVirgo	SIB2	Suspended Injection Bench 2
AdVirgo	SiC	Silicon Carbide
LIGO	SIDE	Side OSEM sensor
AdVirgo	SILeNTe	<b>System Identification Linear et Nonlinear Techniques</b>
	SIOM	Shanghai Institute of Optical Materials
LIGO	SIRE	Single Inspiral Reader
	SISO	Single Input Single Output
AdVirgo	SL	Slave Laser
	SLC	Stray Light Control
AdVirgo	SLC	Stray Light Control subsystem
AdVirgo	SLED	Superluminescent Diode (Super LED)
AdVirgo	SM	Single-Mode
LIGO	SM	Science Mode
LIGO	SM1	Steering Mirror 1
LIGO	SM2	Steering Mirror 2

LVC Abbreviations and Acronyms

Collaboration	Abbreviation / Acronym	Expansion
LIGO	SM3	Steering Mirror 3
AdVirgo	SMA	SubMiniature version A connector
AdVirgo	SMS	Slow Monitoring Station
AdVirgo	SNEB	Suspended North End Bench
AdVirgo	SNC	interferometer SeNsing and Control
AdVirgo	SNR	Signal to Noise Ratio
	SNR	Signal-to-Noise Ratio
LIGO	SNSM	SenseMon
LIGO	SOS	Small Optics Suspension
AdVirgo	SPD	SPeedD
AdVirgo	SPK	SPoKespersion
AdVirgo	SPL	Sound Pressure Level
LIGO	SPOB	Sideband Picked-Off at Beam-splitter
AdVirgo	SPR	Software Problem Report
AdVirgo	SPRB	Suspended Power Recycling pickoff Bench
AdVirgo	SQB	SQueezer Board
AdVirgo	SQZ	vacuum SQueeZing
LVC	SR	Signal Recycling
LVC	SRC	Signal Recycling Cavity
AdVirgo	SRCL	Signal Recycling Cavity Length
LVC	SRM	Signal Recycling Mirror
AdVirgo	SSFS	Second Stage of Frequency Stabilization
AdVirgo	SSO	Single Sign On
AdVirgo	Stol	Raw data storage
AdVirgo	STAMP	Stochastic Transient Analysis Multi-detector Pipeline
LIGO	STS	Streckheisen Tri-axial Seismometer
LIGO	SUM	Sum
LIGO	SUM	Sum of photodiode currents
	SUP	Support Equipment
	SURF	Summer Undergraduate Research Foundation
LIGO	SUS	Suspension
AdVirgo	SUS	SUSpension system
AdVirgo	SVN	SubVersioN
AdVirgo	SW	Switch (of photodiode for locking input signal)
AdVirgo	SWEB	Suspended West End Bench
	TAMA	Japanese Interferometric Gravitational-Wave Project
AdVirgo	TB	Tube
AdVirgo	TB	central area Technical Building
	TB	Terabytes
AdVirgo	TBC	To Be Confirmed
GEO	TCC	Tank Central Corner
GEO	TCe	Tank Central east
GEO	TCMa	Tank Central Mode cleaner a
GEO	TCMb	Tank Central Mode cleaner b



LVC Abbreviations and Acronyms

Collaboration	Abbreviation / Acronym	Expansion
GEO	TCn	Tank Central north
GEO	TCOa	Tank Central Output a
AdVirgo	TCP/IP	Transmission Control Protocol/Internet Protocol
AdVirgo	TCS	Thermal Compensation System subsystem
LVC	TCS	Thermal Compensation System
AdVirgo	TDBox	Timing Distribution Box
AdVirgo	TDR	Technical Design Report
AdVirgo	TDS	Technical Documentation System
AdVirgo	TE	TEmperature
LIGO	TEC	Thermo-Electric Cooler
LIGO	TEMP	Temperature
LIGO	TEMPO	Outdoor Temperature
AdVirgo	TF	Transfer Function
AdVirgo	TFB	TOLM Frame Builder
GEO	TFe	Tank Far east (end-X)
GEO	TFn	Tank Far north (end-Y)
LIGO	TFP	Thin Film Polarizer
AdVirgo	TGG	Terbium Gallium Garnet
	thinca	Thinking Inspiral Coincidence Analysis
LIGO	THST	Thunderstorm Monitor
LIGO	TI	Test Input
LIGO	TILT	Tiltmeter
AdVirgo	TiM	Timing
AdVirgo	TIM	TIMing system
LIGO	TIP	Test Input Pitch
AdVirgo	TIS	Total Integrated Scattering
LIGO	TIY	Test Input Yaw
AdVirgo	TM	Technical Manager
AdVirgo	TM	Test Mass
aLIGO	TMS	<a href="#">Transmission Monitor System or Suspension</a>
LIGO	TNI	Thermal Noise Interferometer
LIGO	TO	Test Output
AdVirgo	TO	Tower
AdVirgo	To	Tower vacuum system
AdVirgo	TOLM	Timing and Optical Link Module
AdVirgo	TOLM-PCI	Timing and Optical Link Module, Peripheral Component Interconnect
AdVirgo	TOLM-PMC	Timing and Optical Link Module, PCI Mezzanine Card
LIGO	TOP	Test Output Pitch
LIGO	TOY	Test Output Yaw
AdVirgo	TRA	TRAnsmiSSion
LIGO	TRANS	Transmitted light
AdVirgo	TSP	Titanium Sublimation Pump
LIGO	TT	Tip Tilt
AdVirgo	Tu	Tube vacuum
AdVirgo	TX	Theta X
AdVirgo	Ty	Theta Y

LVC Abbreviations and Acronyms

Collaboration	Abbreviation / Acronym	Expansion
AdVirgo	tz	theta z
AdVirgo	UGF	Unitary Gain Frequency
LIGO	UGF	Unity Gain Frequency
LVC	UHV	Ultra High Vacuum
LVC	UL	Upper-Left
	UL	Upper Limits
LIGO	UPR	Used Percentage Ratio
AdVirgo	UPS	Uninterruptible Power Supply
LIGO	UPV	Use Percentage Veto
LVC	UR	Upper-Right
AdVirgo	v	vertical
AdVirgo	V	Vertical direction
AdVirgo	V	Voltage
AdVirgo	V+	Virgo+
LVC	VAC	VACuum system
	VCO	Voltage Controlled Oscillator
AdVirgo	VCS	Virgo Common Software
AdVirgo	VDAS	Virgo Data Analysis Software
AdVirgo	VDB	Virgo Database
LIGO	VEA	Vacuum Equipment Area (at observatory mid- and end-stations)
AdVirgo	VEB	Virgo Editorial Board
AdVirgo	VIC	Virgo Interferometer Channels database
AdVirgo	VIM	Virgo Interferometer Monitor
AdVirgo	Virgo	not an acronym, sixth constellation of the zodiac
AdVirgo	VLAN	Virgo Local Area Network
AdVirgo	VME	Versabus Module Eurocard
AdVirgo	VRS	Virgo Reference System
AdVirgo	VSR#	VIRGO Scientific Run # (e.g. VSR1 is VIRGO Scientific Run 1)
AdVirgo	VSR4	Virgo Scientific Run 4
LIGO	VSRM	Variable Signal Recycling Mirror
AdVirgo	W2	West tube section 2
AdVirgo	WAB	West Arm Building
	WAN	Wide Area Network
LIGO	WBRF	Wide Band RF receiver
	WBS	Work Breakdown Structure
LIGO	WDIR	Wind Direction
AdVirgo	WDF	Wavelet Detection Filter
AdVirgo	WE	West End
AdVirgo	WEB	West End Bench
AdVirgo	WEBD	West End Building
AdVirgo	WEDB	West End Detection Bench
LIGO	WFS	Wave-Front Sensor

LVC Abbreviations and Acronyms

Collaboration	Abbreviation / Acronym	Expansion
AdVirgo	WI	West Input
LIGO	WIND	Wind speed
	WNB	White Noise Burst
AdVirgo	WNWS	Wind North-South
AdVirgo	WT	West Tower
AdVirgo	WUI	Web User Interface
AdVirgo	x	horizontal motion in the mirror's plane
AdVirgo	X	horizontal direction perpendicular to optical axis
AdVirgo	y	vertical motion in the mirror's plane
LIGO	Y	Yaw
AdVirgo	Y	vertical direction
AdVirgo	z	longitudinal motion (along the beam direction)
AdVirgo	Z	horizontal direction along optical axis
AdVirgo	Zeus	lightning detection