LIGO-M080375-V5 (Abbreviations And Acronyms)

2010 04 17 Update

Abbreviation / Acronym	Meaning / Explanation
1PPS	One Pulse Per Second
40m	R&D Test Facility at LIGO Caltech
40m Lab	R&D Test Facility at LIGO Caltech
AA	Anti-Aliasing
AAAS	American Association for the Advancement of Science
AC	Alternating Current
ACIGA	Australian Consortium for Interferometric Gravitational Wave Astronomy
ACR	Advanced LIGO Change Request
ACWP	Actual Cost of Work Performed
ADC	Analog-to-Digital Converter
ADCU	Analog Data Collection Unit; Analog to Digital Converter Unit (A computer that takes an analog signal and assigns a digital value for computations)
AdL	Advanced LIGO (not used after 20091104; use aLIGO instead)
AdLIGO	Advanced LIGO (not used after 20091104; use aLIGO instead)
AdvLIGO	Advanced LIGO (not used after 20091104; use aLIGO instead+B33)
AEI	Albert Einstein - Max Planck Gravitational Wave Institute, partner with LZH
AI	Anti-Imaging
AIC	Advanced Interferometer Configurations (USF)
AL	Advanced LIGO (not used after 20091104; use aLIGO instead+B454)
ALH	Alarm Handler (EPICS)
aLIGO	Advanced LIGO (used after 20091104)
ALS	Armlength Stabilization System (aLIGO ISC)
ALUK	Advanced LIGO UK consortium
AM	Amplitude Modulation
AMD	Acoustic Mode Damper
AMU	Atomic Mass Unit
ANL	Argonne National Laboratory?
ANU	Australian National University
AOC	Adaptive Optics Compensation
AOM	Acousto-Optic Modulation
AOS	Auxiliary Optics System (subsystem in aLIGO)
API	Application Programming Interface
AR	Anti-Reflection Coating; Anti-Reflective
AS	Anti-Symmetric
ASC	Alignment Sensing and Control (detector subsystem) - Generally speaking, this controls mirror positions (6 degrees of freedom); Angular Sensing and Control
ASI	Anti-Symmetric Input
ASIC	Application Specific Integrated Circuit
ASPD	Anti-Symmetric Photo Diode (4 of them on ISCT4)
ATM	Asynchronous Transfer Mode (communications protocol)
ATR	Acceptance Test Report

AWG	Arbitrary Waveform Generator
BAC	Budget at Completion
BAE	Biological and Agricultural Engineering
Baudline	A plotting tool
BBH	Binary Black Hole pair
BCS	Beam Centering Servo - Centers beam on beam splitter (visual on SPIRICON)
BCWP	Budgeted Cost of Work Performed
BCWS	Budgeted Cost of Work Scheduled
BH	Black Hole
BH-BH	Black Hole - Black Hole (Binary Black Hole pair)
BJT	Bipolar Junction Transistor
BNC	Bayonet Nut Connector
BNS	Binary Neutron Star pair
BOSEM	Birmingham University version of the OSEM, optical sensor - electromagnetic motor unit
BPCU	Beam Pointing Control Unit
BRDF	Bidirectional Reflection Distribution Function
BS	Beam Splitter; Obvious academic alternative reluctantly removed
BSC	Basic Symmetric Chamber; Beam Splitter Chamber (large vacuum chamber)
BSC1	LLO - houses ITMY
BSC2	LLO - houses Beam splitter
BSC3	LLO - houses ITMX
BSC4	LLO - houses ETMX
BSC5	LLO - houses ETMY
BSM	Beam Spot Motion
BT	Beam Tube
BTE	Beam Tube Enclosure
CA	Clear Aperture; Channel Access (EPICS Control & Monitoring system network protocol)
CACR	Center for Advanced Computer Research (Caltech)
CAD	Computer Aided Design
CaJAGWR	Caltech-JPL Association for Gravitational Wave Research
Caltech	California Institute of Technology
CARM	Common Arm Length - Sum of the arm length (known to establish laser frequency) = (Lx + Ly)
CB&I	Chicago Bridge & Iron
CBC	Compact Binary Coalescence
CC	Civil Construction
CCB	Change Control Board; Configuration Control Board
CCD	Charge Coupled Device
CD	Conceptual Design
CDR	Conceptual Design Review
CDRL	Contract Data Requirements List
CDS	Control and Data System (detector subsystem)
CIT	California Institute of Technology
CMRR	Common Mode Rejection Ratio
CMS	Control and Monitoring System (a part of CDS)
CO	Carbon Monoxide (red face, sleepiness, quiet death)
CO_2	Carbon Dioxide (blue face, panic, horrible death)
COC	Core Optics Components (detector subsystem)

Conlog	A method of monitoring and storing EPICS channel values
COS	Core Optics Support (detector subsystem)
COTS	Commercial Off-The-Shelf (procured items)
CP	Cryogenics Pump; Compensation Plate (part of TCS); Chiller Pad (part of FAC)
CR	Control Room
CRC	Cyclic Redundancy Check
CSIRO	Commonwealth Scientific and Industrial Research Organization (Australia)
CSSR	Cost Schedule Status Report
CVS	Concurrent Versions System - A method for controlling versions
CW	Continuous Wave
DAC	Digital-to-Analog Converter
DAQ	Data Acquisition (Diagnostics and Contols (aLIGO Subsystem name))
DAQS	Data Acquisition System
DARM	Differential Arm {Length, Signal} - Difference between the x and y arm lengths; This is the main interferometer output signal for GW detection = (Lx - Ly)
DASWG	Data Analysis Software Working Group
Dataviewer	A data visualization tool
dB	Decibel
DBB	Diagnostic Bread Board
DC	Direct Current (steady state)
DCC	Document Control Center
DCMON	DC Monitor (Voltage or Current Monitor)
DCPD	DC Photodiode
DCS	Data and Computing Systems (aLIGO subsystem name)
DCU	Data Collection Unit
Deg	Degree, Degrees
DET	Detector system
DFT	Discrete Fourier Transform (as opposed to Fast Fourier Transforms (FFT))
DI	Digital Interferometry, system to allow pre-lock positioning of mirrors
DIA	Data Information Area (of reflected memory)
DIN	Deutsches Institut fur Normung (German Standards Organization)
DMA	Direct Memory Access
DMRO	Differential Mode Read-Out
DMT	Diagnostic Monitoring Tool; Data Monitoring Tool
DOF	Degree Of Freedom
DRD	Design Requirements Document
DRFPM	Dual-Recycled Fabry-Perot Michelson (Interferometer)
DRR	Design Requirements Review
DSE	Detector Systems Engineering
DSP	Digital Signal Processing
DTT	Diagnostic Test Tool
e2e	End-To-End Modeling (interferometer simulation)
E2E	End-To-End Modeling (interferometer simulation)
EAC	Estimate at Completion
ECA	EPICS Channel Access
ECD	Eddy Current Damping
EDCU	EPICS Data Collection Unit

EDSU	EPICS Data Server Unit
EFT	Effective Field Theory
EGO	European Gravitational Wave Observatory
eLIGO	Enhanced LIGO
EMC	Electro-Magnetic Compatibility
EMI	Electro-Magnetic Interference
En	Engineering Run n (for example, E4 is Engineering Run 4)
EO	Electro-Optical
EOM	Electro-Optic Modulator (optical hardware)
EPI	External Pre-Isolator
EPICS	Experimental Physics and Industrial Control System
ER	Engineering Run
ERC	Electronic Rule Checking (PCB Design)
ESD	Electro-Static Discharge
ET	Einstein Telescope
ETC	Estimate to Complete (estimated cost to complete work)
ETF	Engineering Test Facility (Caltech Lab)
ETM	End Test Mass (mirror) - Partially reflective mirror; second mirror in Fabry Perot Cavity
ETMX	End Test Mass - X arm
ETMY	End Test Mass - Y arm
EXC	Excitation (channel)
EZCA	Easy Channel Access(?) EPICS Application(?)
FAC	Facilities (part of CC) - replaced by FMP
FCMS	Facility Control and Monitoring System
FCR	Facility Control Room
FDR	Final Design Review
FE	Front End (computer)
FEA	Finite Element Analysis
FEI	Facilities Engineering Items
FEM	Finite Element Model/Method
FET	Field-effect Transistor
FFT	Fast Fourier Transform (as opposed to Discrete Fourier Transforms (DFT))
FI	Faraday Isolator (optical component)
FIFO	First In First Out
FINESSE	Frequency Domain Interferometer Simulation Software
FIR	Finite Impulse Response (filter)
FIT	Function and Integration Test
FM	Folding Mirror; Frequency Modulation
FMEA	Failure Modes and Effects Analysis
FMP	Facilities Management Plan; Facility Modifications and Preparations
FP	Fabry-Perot cavity
FPGA	Field Programmable Gate Array
FR	Faraday Rotator (optical component)
Framebuilder	A DAQS computer dedicated to building frames
FS	Fused Silica
FSR	Full Scale Reference
FSS	Frequency Stablization Servo

FTE	Full Time Equivalent
FTIR	Fourier Transform Infrared, Frustrated Total Internal Reflection
GASF	Geometrical Anti-Spring Filter
GB	Ghost Beam
GC	General Computing
GDS	Global Diagnostics System
GenComp	General Computing
GEO	German-English Observatory; British-German Cooperation for Gravity Wave Experiment
GFLOPS	Giga (1000 Million) Floating Point Operations per Second
GPM	Gallons Per Minute
GPS	Global Positioning System
GRB	Gamma-Ray Burst
GS13	Geotech, Inc. Seismometer Model GS-13
GUI	Graphical User Interface
GW	Gravity Wave, Gravitational Wave
GWADW	Gravitational Wave Advanced Detector Workshop
GWB	Gravity Wave Band (10Hz through 10 kHz)
GWDAW	Gravitational Wave Data Analysis Workshop
GWIC	Gravitational Wave International Committee
H	Horizontal
H1	Hanford 4K Interferometer
H2	Hanford 2K Interferometer (to be revised to 4K by aLIGO)
HAM	Horizontal Access (Axis) Module; general purpose optics vacuum chamber (input and output optics)
HAM1	LLO - holds MC1, MC3, MMT1, and MMT3
HAM2	LLO - holds MC2, MMT2
HAM3	LLO - holds recycling mirror
HAM4	LLO - holds telescopes, anti-symmetric port, excess light catcher
HAM5	LLO - currently empty
HAM6	LLO - holds output mode cleaner
HEPI	Hydraulic External Pre-Isolator, an element of the SEI that isolates chambers from seismic activity
HG	Hermite-Gauss (typically refers to a rectangularly symmetric basis)
HLTS	HAM Large Triple Suspension
HOM	High Order Mode
HPLF	High Power Laser Facility
HPSS	High Performance Storage System (IBM)
HR	High Reflectance (mirror coating); Highly Reflective; Human Resources
HSTS	HAM Small Triple Suspension
HTM	Higher Transverse Modes (other than TEM00 mode)
HTR	Heater - Heats up a block of aluminum to control the shape of a mirror in the OMC (the mirror is mounted to the aluminum block)
HVAC	Heating Ventilation and Air Conditioning
HWCI	Hardware Configuration Item
HWP	Half-Wave Plate (optical hardware)
Hz	Hertz (cycles per second)
I/O	Input/Output
IAS	Initial Alignment System (part of aLIGO AOS); Institut d'Astrophysique Spatiale

IC	Integrated Circuit
ICD	Interface Control Document
ICS	Inventory Control System
ICWD	Interface Control Working Group
IDC	Insulation Displacement Contact (Connector)
IDE	Integrated Drive Electronics (disk standard)
IFO	Interferometer - Device used to measure interference of light
IIR	Infinite Impulse Response (filter)
IL	Initial LIGO
iLIGO	Initial LIGO
ILMON	In-Loop Monitor (witness sensor for RIN on the laser light)
ILSENS	In-Loop Sensor for PSL's ISS
IMC	Input Mode Cleaner (iLIGO 'MC')
IMS	Input Mode cleaner Suspension (Obsolete in aLIGO)
Infiniband	Point-to-point, bi-directional, high-speed, serial link
InGaAs	Indium-Gallium-Arsenide
INJ	Injected Signal (Injection)
INS	Installation (aLIGO subsytem name)
INSA	French National Institute for Applied Science
IO	Input Optics (detector subsystem, formerly named Input / Output Optics)
IOO	Input / Output Optics (obsolete)
IOT	Input Optics Table - Views mode cleaner transmission and reflection
IP	Ion Pump; Inverted Pendulum; Internet Protocol
IPS	Inductive Position Sensor
IR	Infrared
ISC	Interferometer Sensing and Control - Sensors to monitor the function of the interferometer; Instrument Sensing and Control
ISCT1	LLO - Views symmetric port (bright fringe) of interferometer
ISCT2	LLO - Views ???
ISCT3	LLO - Views Y-pickoff
ISCT4	LLO - Views Anti-symmetric (AS) (dark fringe) of interferometer/ Views X-pickoff/ Views Beam-Splitter pick off
ISCTn	Interferometer Sensing and Control Table n (n corresponds to the HAM it is closest to)
ISI	Internal Seismic Isolation, an element of the SEI
ISR	Interrupt Service Routine
ISS	Intensity Stabilization Servo
ITM	Input Test Mass (mirror) - Partially reflective mirror; first mirror in Fabry-Perot Cavity
ITMX	Input Test Mass 'X' arm
ITMY	Input Test Mass 'Y' arm
IV&V	Integration, Verification, and Validation
IWG	Interface Working Group
IXS	Information eXchange Services
JFET	Junction Field-effect Transistor
kpc	Kiloparsec
L1	Livingston 4km Interferometer
L4C	Sercel Seismometer Model L4C
LA	Louisiana

LAI	Lock Acquisition Interferometer
LAL	LIGO Algorithm Library
LAN	Local Area Network
LAS	Lock Acquisition System
LASTI	LIGO Advanced Systems Test Interferometer (test facility at LIGO/MIT)
LBA	Lanthanum-β-Aluminate (a form of sapphire)
LDAS	LIGO Data Analysis System
LDR	Laser Diode Room
LEA	Laser Enclosure Area
LG	Laguerre-Gauss (typically refers to a circularly symmetric basis)
LHAM	Horizontal Access Module at Louisiana Site
LHO	LIGO Hanford Observatory
LIGO	Laser Interferometer Gravitational Wave Observatory
LISA	Laser Interferometer Space Antenna
LLO	LIGO Livingston Observatory
LMA	Laboratoire des Matériaux Avancés - vendor for optical coatings in Lyon, France
LMXB	Low-Mass X-Ray Binary
LOE	Level of Effort (costant effort with no deliverables, i.e. Project Management)
LOS	Large Optics Suspension
LSC	LIGO Scientific Collaboration; Length Sensing and Control (monitors the length of the Fabry-Perot Cavity (the arms))
LSO	Laser Safety Officer
LTI	Linear, Time-Invariant (systems) have a transfer function that relates input to output.
LVAX	LLO - Kantech definition of VEA-X
LVAY	LLO - Kantech definition of VEA-Y
LVC	LIGO-Virgo Science Consortium
LVDT	Linear Variable Differential Transducer
LVEA	Laser and Vacuum Equipment Area (at observatory corner stations) - This room houses PSL, BS, ITMX, ITMY among other things; Large Vacuum Enclosure Area
LXI	LAN Extension for Instruments
LZH	Laser Zentrum Hannover, partner with AEI
m/rtHz	meter per square root Hertz
MAP	Memory Allocation Pointer (reflected memory)
MB	Megabyte
MC	Mode Cleaner Optic (iLIGO - usually MCx, where x = {1,2,3}) - Stabilizes mode of laser
MCL	Mode Cleaner Length (Servo control signal)
MCM	Mode Cleaner Mirror
MCWFS	Mode Cleaner Wave-Front Sensor
MDC	Mock Data Challenge
mDV	MATLAB Data Viewer
MEDM	Motif Editor and Display Manager (GUI for control screens)
MEPI	Magnetic External Pre-Isolator
MFLOPS	Mega (Million) Floating Point Operations Per Second
MGASF	Monolithic Geometrical Anti-Spring Filter
MICH	Michelson cavity length = (lx - ly)
MIMO	Multiple Input, Multiple Output
MIT	Massachusetts Institute of Technology

mm	millimeter
MMT	Mode Matching Telescope - A beam expander that sets the laser to a particular mode
MOPA	Master Oscillator-Power Amplifier
MOU	Memorandum of Understanding
MP	Mass Position
Mpc	Megaparsec
MPE	Maximum Permissible Exposure (Laser Radiation)
MPI	Message Passing Interface
MRE	Major Research Equipment
MSPRC	Marginally Stable Power Recycling Cavity
MSR	Main Storage Room
MSU	Moscow State University
MTBF	Mean Time Between Failures
MTS	Master Timing System
MTTR	Mean Time To Repair
MTU	Master Timing Unit (see TMU)
MZ	Mach-Zender Interferometer
NA	Not Applicable; Not Available; Not Allowed
NAT	Network Address Translation
NB	Noise Budget
NBI	Neutron Star Binary Inspiral
Nd:YAG	Neodynium doped Yttrium Aluminum Garnet (laser gain medium)
NDS	Network Data Server
NDSG	NDS Gateway computer
NHZ	Nominal Hazard Zone (Laser Radiation)
NIC	Network Interface Card
NLNM	New Low Noise Model (Peterson, 1993)
nm	nanometer
NPRO	Non-Planar Ring Oscillator
NRSB	Non-Resonant Side Band
NS	Neutron Star
NSF	National Science Foundation
NS-NS	Neutron Star - Neutron Star
NSPOB	Normalized Sideband Power On the Beam-Splitter
NTP	Network Time Protocol
ODE	Ordinary Differential Equation
OL	Optical Lever
OLMON	Out-of-Loop Monitor (monitor the intensity noise after the mode cleaner - PSL's ISS)
OMC	Output Mode Cleaner - Stabilizes mode in output laser
OOP	Object-Oriented Programming
OPAMP	Operational Amplifier (from analog computer *operations*)
OPD	Optical Path Difference
OPL	Optical Path Length
Optickle	Frequency Domain IFO Simulator (Matlab)
OptLev	Optical Lever; sometimes OpLev (part of aLIGO AOS)
OSA	Optical Spectrum Analyzer
OSB	Operations Support Building

OSEM	Optical Sensor Electromagnetic Motor (suspension sensor/actuator unit) (Optical Shadow Sensor and Magnetic Actuator)
OSG	Open Science Grid
OTAS	OMC Thermal Actuation System
OTF	Optics Test Facility at Caltech
P3F	Payload Polar Positioning Fixture
PAC	Program Advisory Committee
PCB	Printed Cirsuit Board
PCIX	Peripheral Component Interconnect Extended (a computer standard for peripheral communication)
PD	Photo Diode; Preliminary Design
PDD	Preliminary Design Document
PDE	Partial Differential Equation
PDH	Pound-Drever-Hall (reflection locking technique)
PDMWorks	Product Data Management Works (SolidWorks CAD file repository and version control system)
PDR	Preliminary Design Review
PDRR	Preliminary Design Requirements Review
PDT	Photo Detector
PEM	Physical and Environmental Monitor - Includes 3 weather stations, accelerometers, seismometers, microphones, temperature sensors; Physics Environment Monitoring
PGA	Programmable Gate Array
PhCal	Photon Calibrator (part of aLIGO AOS)
PI	Parametric Instability
PIT	Pitch
PLC	Plano-Convex Lens
pm	picometer
PM	Phase Modulation; Project Management; Preventitive Maintenance
PMC	Pre-Mode Cleaner
PMP	Project Management Plan
PMX	Particle Mobility Experiment
PO	Pick Off (usually in reference to a laser beam)
POB	Pick Off Beam <splitter>
POP	Pick Off Power (from Power Recycling Cavity)
POSIX	Portable Operating System Interface (IEEE Standard 1003.1)
POX	Pick Off X Arm (at ITMX)
PPE	Personal Protection Equipment
ppm	parts per million
PPS	Pulse Per Second - the timing heartbeat
PR	Power Recycling Optic (usually PRx, where x = {M,2,3})
PRC	Power Recycling Cavity
PRCL	Power Recycling Cavity Length = (lp + (lx + ly)/2)
PRM	Power Recycling Mirror - Recycles light within the interferometer; Power Recycled Michelson
PRN	Pseudo-Random Noise
PSL	Pre-Stabilized Laser (detector subsystem)
PTX	Power Transmitted X-arm
PTY	Power Transmitted Y-arm
PUM	Pen-Ultimate (3rd level on quad SUS rack)

PZT	Piezoelectric Transducer - Controls the position of one mirror in the OMC (works with HTR to obtain a single mode)
Q	Resonant system Quality factor (inverse of loss)
QND	Quantum Non-Demolition
QPD	Quadrant Photo Diode - Reads transmission of end mirrors and transmission through OMC (for alignment)
QPDX	Quadrant Photo Diode at the X-end station
QPDY	Quadrant Photo Diode at the Y-end station
Quad	Quadruple test mass suspension
R	Reflectivity
R&D	Research and Development
RAID	Removable Array of Independent Drives; Redundant Array of Inexpensive Disks
RAM	Random Access Memory
RBS	Reflective Beam Servo
RC	Radius of Curvature (of a Reflective Mirror); Recycling Cavity
RCG	Realtime Code Generator
RDRR	A good guffaw
REFL	Reflected Light Port on ISCT1 (REFL1 = 61MHz; REFL2 = 24 MHz … may be backwards)
REO	Research Electro-Optics (Company Name)
REU	Research Experience for Undergraduates
RF	Radio Frequency
RFM	Remote File Management
RFP	Request for Proposal
RFPD	RF Photodiode
RFQ	Request for Quote
RH	Relative Humidity
RIN	Relative Intensity Noise
RM	Recycling Mirror
RMS	Root mean square
ROC	Radius Of Curvature
RODA	Record Of Decision Agreement
RSB	Resonant Side Band
RSE	Resonant Sideband Extraction
RT	Real Time
rtHz	square root Hertz
s	Second
s/s	Samples/second
SAH	Sensor Actuator Head
SAP	Sapphire Core Optics
SAS	Seismic Attenuation System
SBX	Sandbox
SCSI	Small Computer Standard Interface
SEI	Seismic Isolation
SEM	Secondary Emission Monitor
SIMMS	Secondary Ion Mass Spectrometry
SiO_2	Silicon Dioxide, fused silica, fused quartz
SIOM	Shanghai Institute of Optical Materials

SIS	Static Interferometer Simulation (Software)
SLC	Stray Light Control
SM	Suspended Steering Mirror (~4" diameter, simple sling suspension)
Sn	Science Run n (for example, S6 is Science Run 6)
SNL	State Notation Langage (EPICS)
SNR	Signal to Noise Ratio
SOS	Small Optics Suspension - SOS is the support of steering mirrors in aLIGO.
SPI	Suspension Point Interferometer; Seismic Platform Interferometer
SPOB	Sideband Pick Off Beam <splitter>
SPRC	Stable Power Recycling Cavity
SR	Signal Recycled
sr	Steradian
SRC	Signal Recycling Cavity
SRCL	Signal Recycling Cavity Length = (ls + (lx + ly)/2)
SRD	Science Requirements Document; also iLIGO planned performance target
SRM	Signal Recycling Mirror - Captures light and puts it back into interferometer (works with arms to amplify power)
SRS	Software Requirement Specification
SRx	Signal Recycling Optic designator (where x = {M,2,3}) (interferometer configuration)
StripTool	A strip chart graphs tool
STS	Streckeisen Tri-axial Seismometer (STS-1 leaf-spring, STS-2 inertial pendulum)
STU	Slave Timing Unit (see TSU)
SUP	Support Equipment
SURF	Summer Undergraduate Research Foundation
SUS	Suspension Subsystem (sometimes also Suspension assembly) which controls the position of the suspended optics (e.g., ETMs, MCs)
SUS/UK	Suspension - UK
SUS/US	Suspension - US
SW	Solid Works (computer aided design software)
SYS	System-wide Information; Detector Systems Engineering
Ta_2O_5	Tantalum Pentoxide (the dielectric mirror material used for LIGO High Reflective coatings)
TAMA	Japanese Interferometric Gravitational-Wave Project (in the Tama region of Tokyo)
TB	Terabytes
TBD	To Be Determined; To Be Done
TCP	Transport Control Protocol
TCS	Thermal Compensation System
TDF	Technology Development Facility
TDS	Time Server Acronym? (Tedious)
TEM	Transverse Electromagnetic Mode (frequency)
TEM00	The lowest order Transverse Electromagnetic Mode possible that exhibits a Gaussian distribution of light across the laser beam
TFP	Thin Film Polarizer (optical hardware)
TGG	Terbium-Gallium-Garnet (optical material used in Faraday Isolators)
TIR	Total Internal Reflection
TM	Test Mass (as in input test mass or end test mass)
TMU	Timing Master Unit (see MTU)
TNI	Thermal Noise Interferometer (R&D Test interferometer at LIGO-Caltech)

TOF/SIMMS	Time-of-Flight Secondary Ion Mass Spectrometry
TOP	Top (upper assembly of SUS structure)
TP	Test Point
TPM	Test Point Manager
TPMAN	Test Point Manager
TPT	Technology Planning Team
TRB	Technical Review Board
Triple	Triple auxiliary optic suspension
TSU	Timing Slave Unit (see STU)
TT	Tip-Tilt (mirror) - Steering mirrors prior to OMC (2 total)
TTFSS	Table Top Frequency Stabilization Servo
TTL	Transistor–Transistor Logic
TwinCAT	The Windows Control and Automation Technology
UDP	User Datagram Protocol
UF	University of Florida
UGF	Unity Gain Frequency
UHV	Ultra High Vacuum
UIM	Upper Intermediate (2^{nd} level stage on quad SUS rack)
UL	Upper Limits, Underwriters Laboratory
ULPA	Ultra Low Particulate Air (cleanroom vacuum cleaner)
UNC	Unified Coarse (Screw Thread Standard)
UNEF	Unified Extra Fine (Screw Thread Standard)
UNF	Unified Fine (Screw Thread Standard)
UTC	Coordinated Universal Time
UUG	Universal Unity Gain?
V	Vertical
VCO	Voltage Controlled Oscillator
VE	Vacuum Equipment (LIGO instrument chambers)
VEA	Vacuum Equipment Area (at observatory mid and end stations) Houses ETMX and ETMY (LLO Kantech calls this LVA)
VIRGO	French-Italian Laser Interferometer Collaboration; Italian-French Laser Interferometer Collaboration
VME	Versa Modular Eurocard (IEEE 1014)
VMS	Violin Mode Sensor (element of aLIGO quad test mass suspension)
VNT	eLIGO Vent Plan
VPN	Virtual Private Network
VPW	Vacuum Preparation Warehouse
VRB	Vacuum Review Board
VSRM	Variable Signal Recycling Mirror
w	Gaussian beam radius parameter
W	Watt
WA	Washington
WAN	Wide Area Network
WBS	Work Breakdown Structure
WFS	Wave Front Sensors
XLR	Cannon "X" series, Latched, Rubberized connectors
ZnSe	Zinc Selenide (material used in CO_2 laser applications; transmissive at the 10micron wavelength)