

Acronyms

AA Automatic Alignment

ACA Actuator Cage (a rigid frame attached to F7)

AC Alternating Current

ACC Accelerometer

ADC Analog-to-Digital Converter

AdV Advanced Virgo

ALP Automation of the Locking Procedure

AMC Advanced Mezzanine Card

AMU Atomic Mass Unit

AOM Acousto-Optic Modulator

AR Anti-Reflective

ARM Advanced RISC Machine

BBH Binary Black Holes

BJ Beam Jitter

BNS Binary Neutron Stars

BPC Beam Pointing Control

BRDF Bidirectional Reflectance Distribution Function

BS Beam Splitter

CB Central Building

CC Corrective Coating

CCD Charge-Coupled Device

CHRoCC Central Heating Radius of Curvature Correction

CITF Virgo Ientral interferometer (6 m armlength test interferometer)

COM Center of Mass

CMRF Common Mode Rejection Factor

CP Compensation Plate

CVS Concurrent Versions System

DAC Digital-to-Analog Converter

DAQ Data Acquisition (in fact, data collection)

DAS Double Axicon System

DARM Differential Arm Length

DC Direct Current

DET Detection Subsystem

DLC Diamond-Like Carbon

DOF Degree(s) of Freedom

DSP Digital Signal Processor

DT Detection Tower

EB End Building

EDB External Detection Bench

EE Electronic Equipment

EIB External Injection Bench

EIB2 Second External Injection Bench

EIB-SAS External Injection Bench-Seismic Attenuation System

EM End Mirror for the arm cavities

EMC Electromagnetic Compatibility

EMI Electromagnetic Interference

ENE_{B1} External North End Bench 1

ENE_{B2} External North End Bench 2

EO Electro-Optical

EOM Electro-Optical Modulator

EPRB₁ External Power Recycling Pickoff Bench 1

EPRB₂ External Power Recycling Pickoff Bench 2

ETM End Test Mass

F0 Filter 0

F7 Filter 7 (also defined steering filter)

FBM Main Frame Builder

FBS Slow Frame Builder

Fd Frame Distribution

FEA Finite Element Analysis

FI Faraday Isolator

FIFO First In First Out

FIR Finite Impulse Response

FOM1 Figure of Merit 1

FP Fabry-Perot

FPGA Field-Programmable Gate Array

FSR Free Spectral Range

GAS Geometric Anti-Springs

Gc Global control

GIPC Global Inverted Pendulum Control

GN₂ Gaseous Nitrogen

GO General Optics

GPS Global Positioning System

GUI Graphical User Interface

GW Gravitational Waves

HOM High Order Mode

HPBD High Power Beam Dump

HP High Power

HPIO High Power Input Optics

HR High Reflectivity

HSF High Spatial Frequency

HV High Vacuum

HVAC Heating, Ventilation and Air Conditioning

HWII HardWare Inventory and Installation database

HWS Hartmann Wavefront Sensor

IB Injection Bench

IBJM Input Beam Jitter Monitoring

IBMS Input Beam Monitoring System

ID Inertial Damping

IM Input Mirror for the arm cavities

IMC Input Mode Cleaner

IME Infrastructure Modifications for Environmental noise reduction

IMMS Infrastructure Machine Monitoring System

INJ Injection subsystem

INF Infrastructure subsystem

IP Inverted Pendulum

IPC Input Power Control

IRIG-B Inter-Range Instrumentation Group type B

ISC Interferometer Sensing and Control

IT Injection Tower

ITF Interferometer

ITM Input Test Mass

IVC Intermediate Vacuum Chamber

I2C Inter Integrated Circuit

LB Large Baffle

LC Local Control

LED Light-Emitting Diode

LHe Liquid Helium

LLab Laser Laboratory

LMA Laboratoire des Matériaux Avancés

LN₂ Liquid Nitrogen

LSF Low Spatial Frequency

LVDS Low Voltage Differential Signal

LVDT Linear Variable Differential Transformer

MC Mode cleaner

MIMO Multiple Input Multiple Output

MMT Mode Matching Telescope

MSPS Mega-Samples Per Second

MSRC Marginally Stable Recycling Cavities

MTBF Mean Time Before Failure

NDRC Non-Degenerate Recycling Cavity

NE North End

NEB North End Building

NI North Input

NTP Network Time Protocol

OL Optical Lever

OMC Output Mode Cleaner

OMC-MMT Output Mode Cleaner Mode Matching Telescope

OPL Optical Path Length

OSD Optical Simulation and Design subsystem

PAY Payload subsystem

PCal Photon Calibrator

PCIe PCI-Express

PCI-X PCI-Extended

PDH Pound-Drever-Hall

PE cold cathode

PI Pirani

PLC Programmable Logic Controller

PMC Pre-Mode Cleaner

PO Pickoff

POP Pickoff Plate

POSD Position Sensing Device

PPS Pulse Per Second

Pr Photo-diode read-out

PR Power Recycling

PRC Power Recycling Cavity

PR Power Recycling Mirror

PSD Power Spectral Density

PSL Prestabilized Laser

PV Peak-to-Valley

PZT Piezo-electric Transducer

QPD Quadrant Photodiodes

RC Recycling Cavity

RF Radio Frequency

RFC Reference Cavity

RGA Residual Gas Analyzer

RH Ring Heater

RIN Relative Intensity Noise

RM Reference Mass

RMS Root Mean Square

RoC Radius of Curvature

RSE Resonant Sideband Extraction

RTL Round Trip Losses

RTP Rubidium Tytanil Phosphate

RTPC Real-Time PC

SA Superattenuator

SAFE Superattenuator Facility at EGO

SAS Seismic Attenuation System

SAT Superattenuator subsystem

SATCS Superattenuator Control System

SBE Suspended Benches subsystem

SCADA Supervisory Control and Data Acquisition

SDB Suspended Detection Bench

SDB1 Suspended Detection Bench 1

SDB2 Suspended Detection Bench 2

SER Serial data

SF Standard Filter

SFP Small Form factor pluggable

SIB Suspended Injection Bench

SIB1 Suspended Injection Bench 1

SIB2 Suspended Injection Bench 2

SiC Silicon Carbide

SLC Stray Light Control subsystem

SLED Superluminescent Diode

SM Single-Mode

SMA SubMiniature version A connector

SMS Slow Monitoring Station

SNEB Suspended North End Bench

SNR Signal to Noise Ratio

SPL Sound Pressure Level

SPR Software Problem Report

SPRB Suspended Power Recycling pickoff Bench

SR Signal Recycling

SRC Signal Recycling Cavity

SRCL Signal Recycling Cavity Length

SR Signal Recycling Mirror

SSFS Second Stage of Frequency Stabilization

SVN Subversion (Apache Software)

SWEB Suspended West End Bench

TB central area Technical Building

TBC To Be Confirmed

TCS Thermal Compensation System subsystem

TCP/IP Transmission Control Protocol/Internet Protocol

TDBox Timing Distribution Box

TDR Technical Design Report

TF Transfer Function

TFB TOLM Frame Builder

TIS Total Integrated Scattering

TM Test Mass

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

TSP Titanium Sublimation Pump

UHV Ultra-High Vacuum

UPS Uninterruptible Power Supply

V+ Virgo+

VAC Vacuum subsystem

VCS Virgo Common Software

VDB Virgo Database

VLAN Virgo Local Area Network

VME Versabus Module Eurocard

VSR4 Virgo Science Run 4

WE West End

WEB West End Building

WI West Input