

Allocation of the tasks for LCGT

AEL

The components that the AEL subsystem is in charge are as follows:

EOM for PMC, RF oscillator for PMC EOM, PD for PMC control, piezo actuators for PMC, EOPM for RC, AOM for RC, PD for RC control, piezo actuators for RC, AOM for gr1, AOM for gr2, EOM for PMC for gr1, EOM for PMC for gr2, EOM for gr1 PDH, EOM for gr2 PDH, RF oscillator for gr1 PMC, RF oscillator for gr2 PMC, RF oscillator for gr1 PDH, RF oscillator for gr2 PDH, PD for gr1 PMC, PD for gr2 PMC, PD for gr1 PDH, PD for gr2 PDH, piezo for green PMCs, f1 PM EOM, f2 PM EOM, f1 AM EOMs, Pockels cell actuator for MZ, PD for MZ refl, PD for MZ trans, PD for MC refl, PD for MC trans, QPDs for MC, CCDs for MC, PD for ISS, PD for REFL (high/low), PD for POP (high/low), PD for ASp (high/low), PD for POX, PD for POY, PD for X-trans, PD for Y-trans, QPDs for REFL (high/low), QPDs for POP (high/low), QPDs for AS (high/low), CARM demodulator, DARM demodulator (RF), PRCL demodulator, MICH demodulator, SRCL demodulator, OMC breadboard actuators, piezo actuators for OMC, QPD for OMC refl, PD for OMC trans,

AOS

The components that the AOS subsystem is in charge are as follows:

FIs (4), FIs for green (2), MMT for gr1, MMT for gr2, lenses for MC WFS, oplev for MC, beam shutter, steering mirrors, pico-motors for steering mirrors, beam dampers, oplev for core optics, holes on baffles, in-vacuum mirror cleaning tools, TCS (if necessary), beam reducing telescope, blackholes for OMC refl stray, output Faraday Isolator,

CRY

The components that the CRY subsystem is in charge are as follows:

radiation shields (8K, 80K), radiation shield supports, PTC head, compressor, valve unit, valve unit support, vibration reduction system, 1st cold stage, 2nd cold stage, heat conductors, vacuum chamber for PTC, defrosters, heat link A, heat link B, IM wire, RM wire, TM fiber (sapphire),

DGS

The components that the DGS subsystem is in charge are as follows:

digital system for MC, digital system for MIF, main system PC, ADC/DAC, AA/AI filters, whitening/dewhitening filters, real-time OS, control software, monitor software, data storage, timing system,

FCL

The components that the FCL subsystem is in charge are as follows:

buildings, car parking, power supply system, clean assy rooms, air conditioners, optical fibers, cranes, vacuum access, clean booth on access, acoustic isolation boxes,

GIF

The components that the GIF subsystem is in charge are as follows:

thermometers, seismometers, particle meters, microphones, hygrometers, baseline interferometers, barometers, accelerometers,

IOO

The components that the IOO subsystem is in charge are as follows:

PMC mirrors, RC mirrors, RC servo, phase-lock system for green, PMC for gr1, PMC for gr2, MC servo, variable attenuator, ISS servos, OMC breadboard,

LAS

The components that the LAS subsystem is in charge are as follows:

40W SFA, Laser modules, water chiller, power supply, green laser 1 (X arm), green laser 2 (Y arm),

MIF

The components that the MIF subsystem is in charge are as follows:

lenses for REFL WFS, lenses for POP WFS, lenses for AS WFS, CCDs for trans (X,Y), CCDs for REFL, attenuation mirror for REFL, CARM servo, oscilloscopes, network analyzer, optical spectrum analyzer, control scripts,

MIR

The components that the MIR subsystem is in charge are as follows:

dielectric mirrors, MZ mirrors, MC mirrors, MMT mirrors, ITM (silica), ETM (silica), ITM (sapphire), ETM (sapphire), BS, PRM, PR2, PR3, SRM, SR2, SR3, ASp pickoff mirror, OMC mirrors,

TUN

The components that the TUN subsystem is in charge are as follows:

3km tunnels, center room, two-story end rooms, Water drainage system, entrance tunnel,

VAC

The components that the VAC subsystem is in charge are as follows:

chambers (A,B,C1,C2), beam tubes, module tubes, borehole tubes, bellows, baffles for gas molecules, baffles for radiation, viewports, gate valves, vacuum gauges, vacuum pumps (turbo, ion), feedthrough,

VIS

The components that the VIS subsystem is in charge are as follows:

Type-A IP, Type-B IP, Type-A filter0, Type-A filter1, Type-A filter2, Type-B filter0, Type-B filter1, MGAS, horizontal-LVDT, piezo-motor (filter2, PF), mini-GAS on PF, motor slider on PF, position sensors (PF, MB), coil-magnet actuators (PF, MB), ESD actuators, PF local control servos, MB local control servos, IM local control

servos, PF, MB, IM, Type-A RM, Type-B RM, Type-C RM, stacks for Type-C, stacks for Type-B (iLCGT), 300K IM wire, 300K RM wire, 300K mirror wire,