

# A+ CONCEPTUAL DESIGN - 05

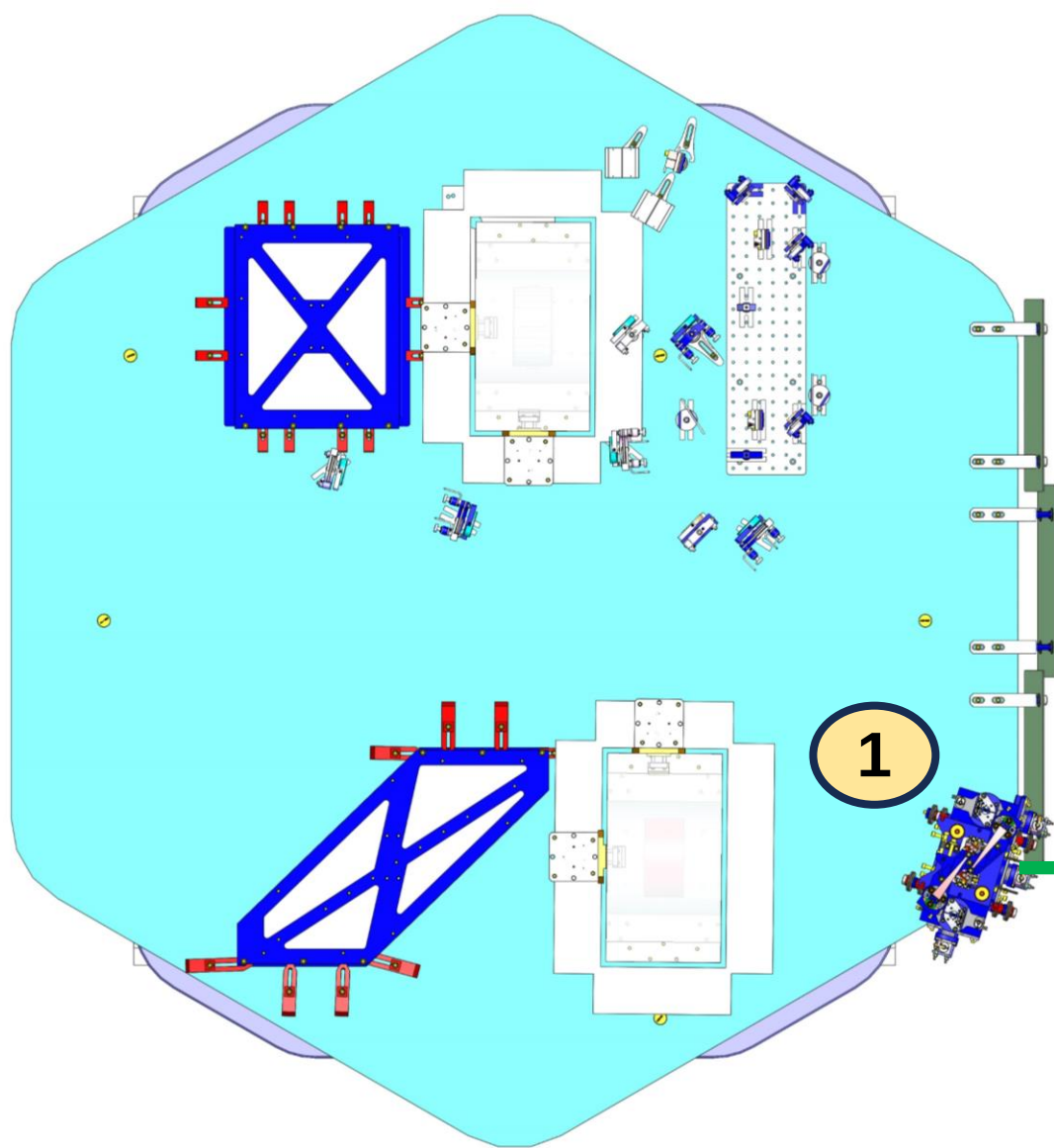
(Completed A+ integrated layout for observing run 05)

LIGO-D1800027-v28

page 1 of 2

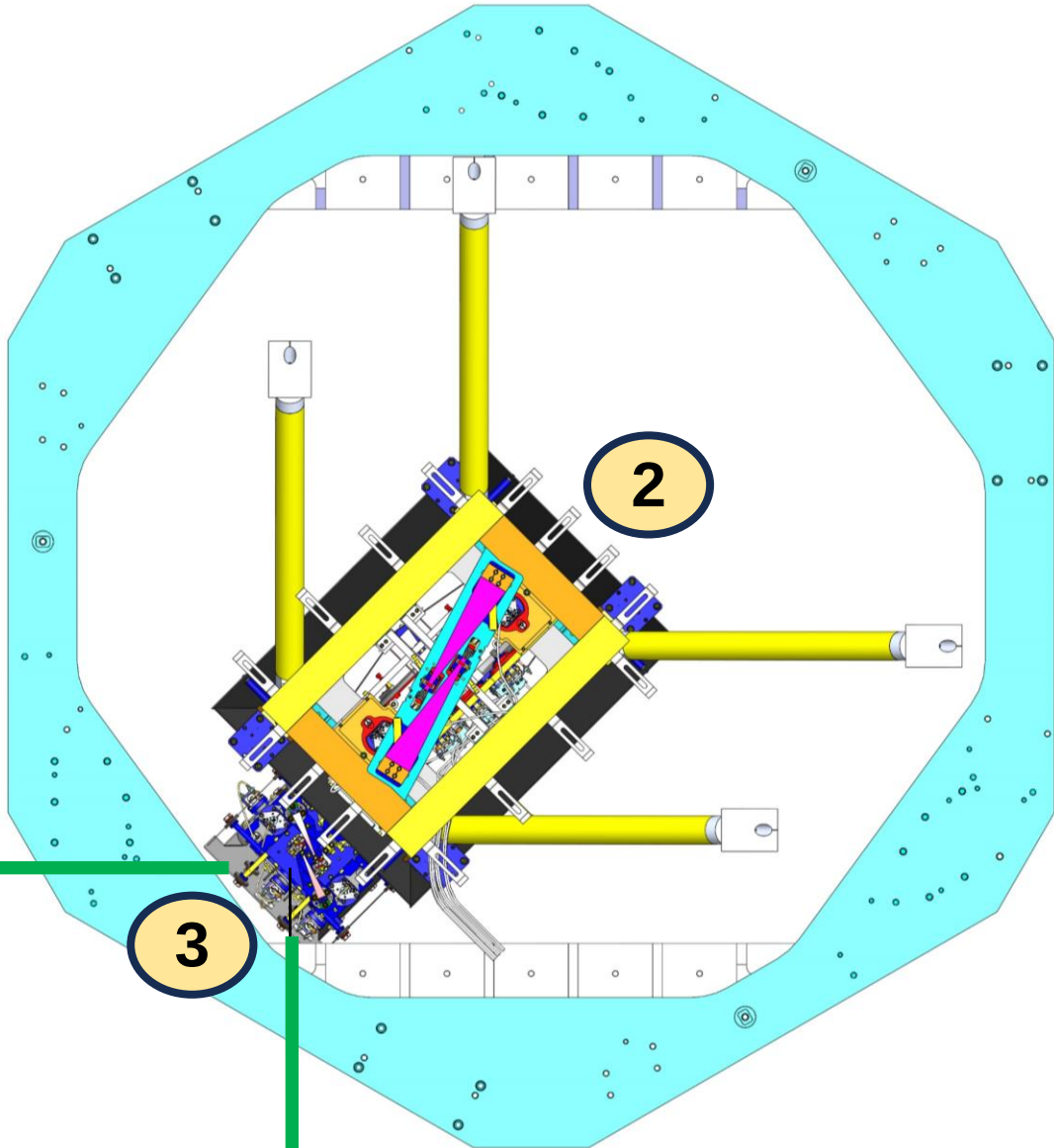
## HAM3

H1: D0901094  
L1: D0900520



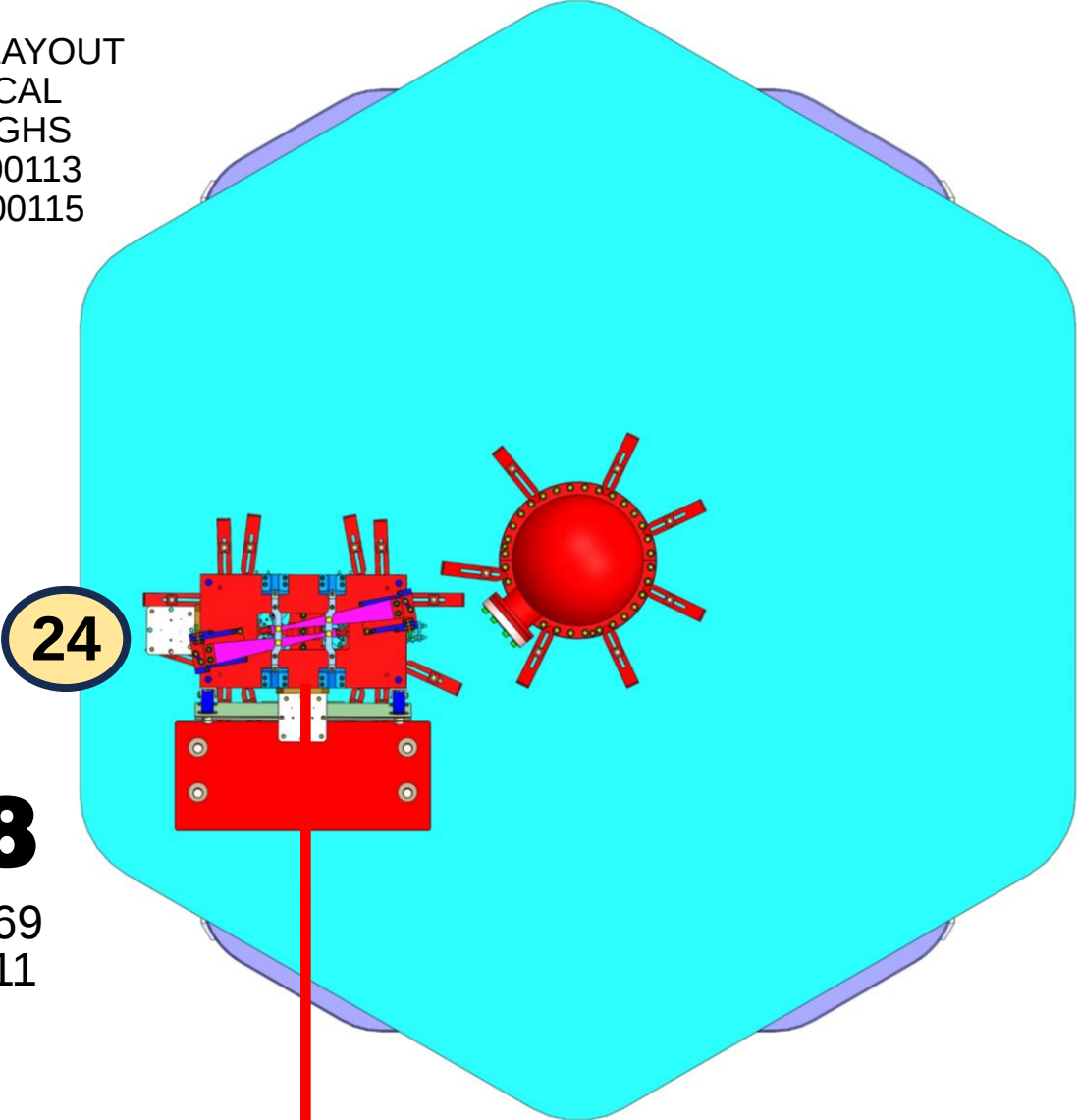
## BSC2

H1: D0901142  
L1: D0900428



## HAM8

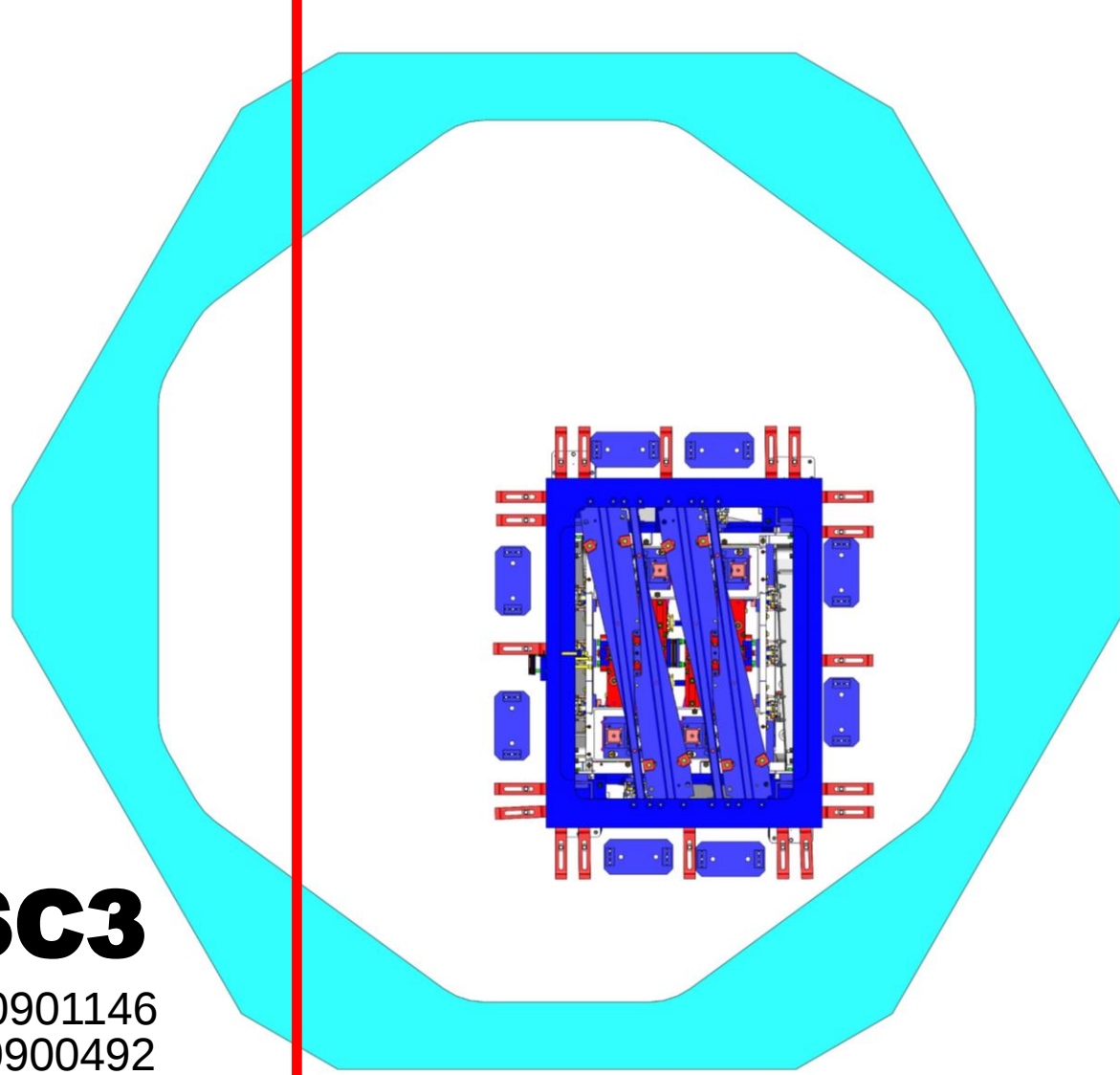
H1: D1900369  
L1: D1900311



~300m long filter cavity

## BSC3

H1: D0901146  
L1: D0900492



## DETAILS:

### HAM3

- 1 LO1 (HRTS with BS, Lo Beam)

### BSC2

- 2 BS (BS 450mm Diameter)  
3 LO2 (HRTS, with Mirror, Lo Beam)

### HAM4

### HAM5

- 4 LO3 (HRTS with Lens, Lo Beam)  
5 ZM6 (HSDS, Double SUS)  
6 LOW LOSS FARADAY ISOLATOR

### HAM6

- 7 OBS (HRTS, Triple SUS)  
8 OM0 (HRTS, Triple SUS)  
9 OMA2 (HPDS, Double SUS w/ Piezo SAMS)  
10 OMA3 (HCDS, Double SUS w/ Piezo SAMS and Dither)  
11 OMA1 (HDDS, Double SUS w/ Dither)  
12 OMB2 (HPDS, Double SUS w/ Piezo SAMS)  
13 OMB3 (HCDS, Double SUS w/ Piezo SAMS and Dither)  
14 OMB1 (HDDS, Double SUS w/ Dither)  
15 OMCA  
16 OMCB } On Single OMC Platform

### HAM7

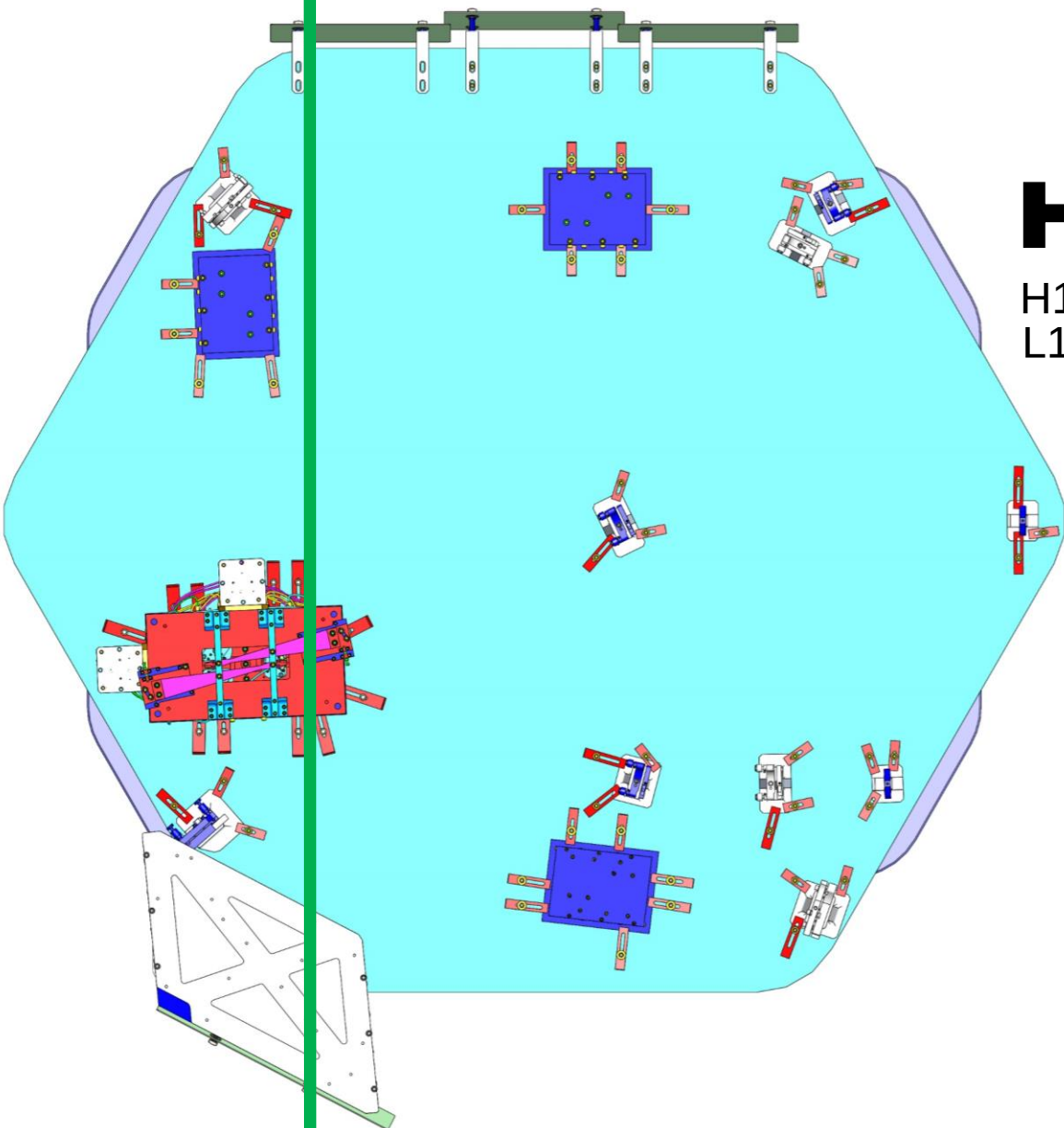
- 18 ZM1 (HDDS, Double SUS w/ Dither)  
19 ZM2 (HPDS, Double SUS w/ Piezo SAMS)  
20 ZM3 (HDDS, Double SUS w/ Dither)  
21 ZM4 (HPDS, Double SUS w/ Piezo SAMS)  
22 ZM5 (HPDS, Double SUS w/ Piezo SAMS)  
23 FC1 (HSTS TRIPLE, FILTER CAVITY)

### HAM8

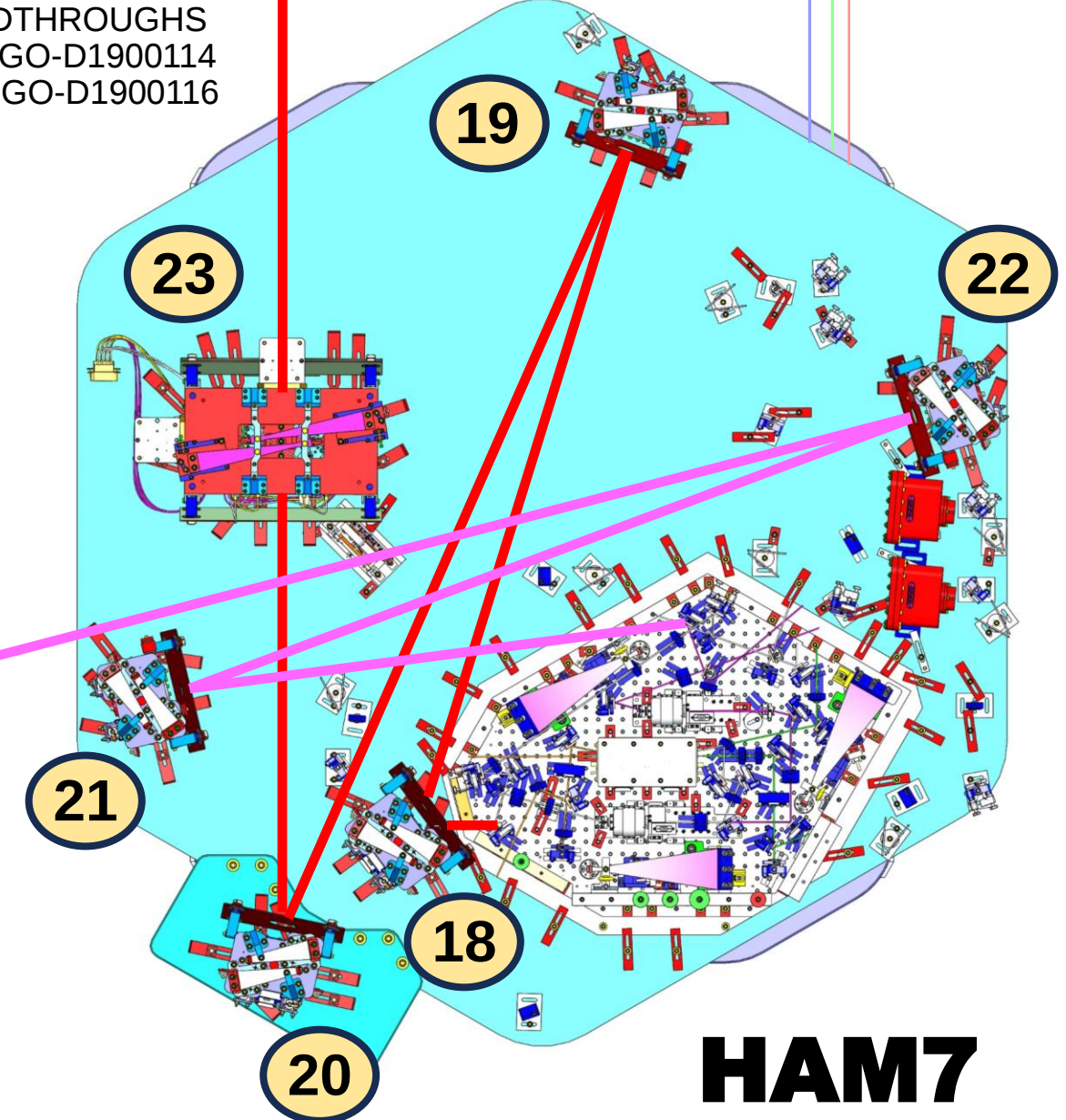
- 24 FC2 (HSTS TRIPLE, FILTER CAVITY)

## HAM4

H1: D0901125  
L1: D0900421

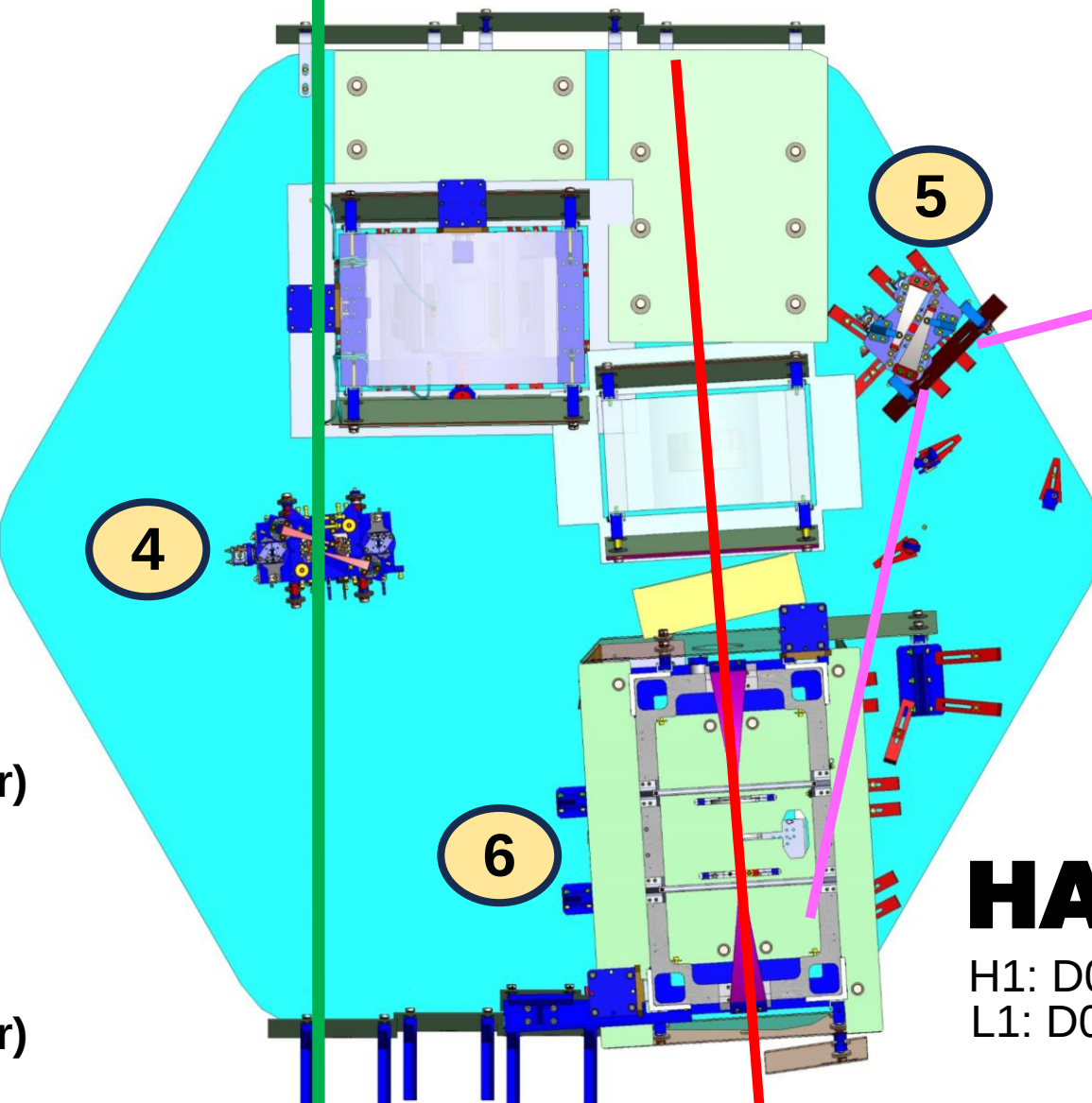


HAM7 FLANGE LAYOUT  
OF ELECTRICAL  
FEEDTHROUGHS  
L1: LIGO-D1900114  
H1: LIGO-D1900116



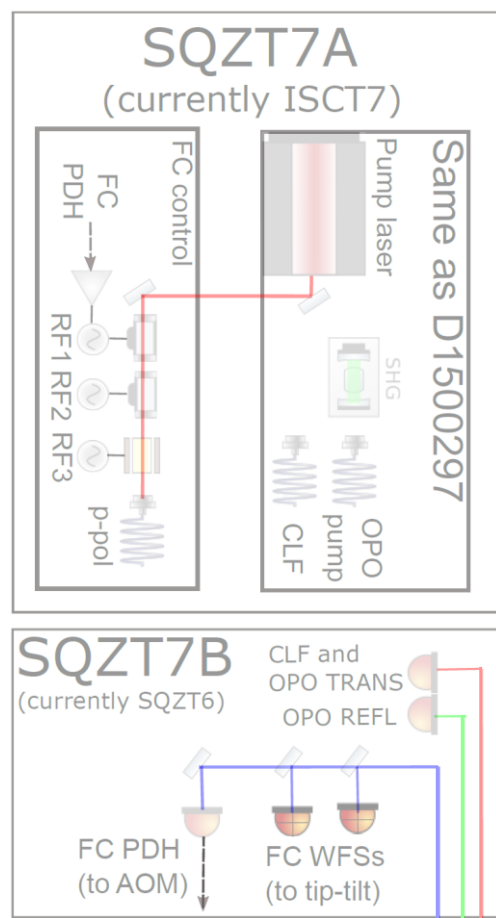
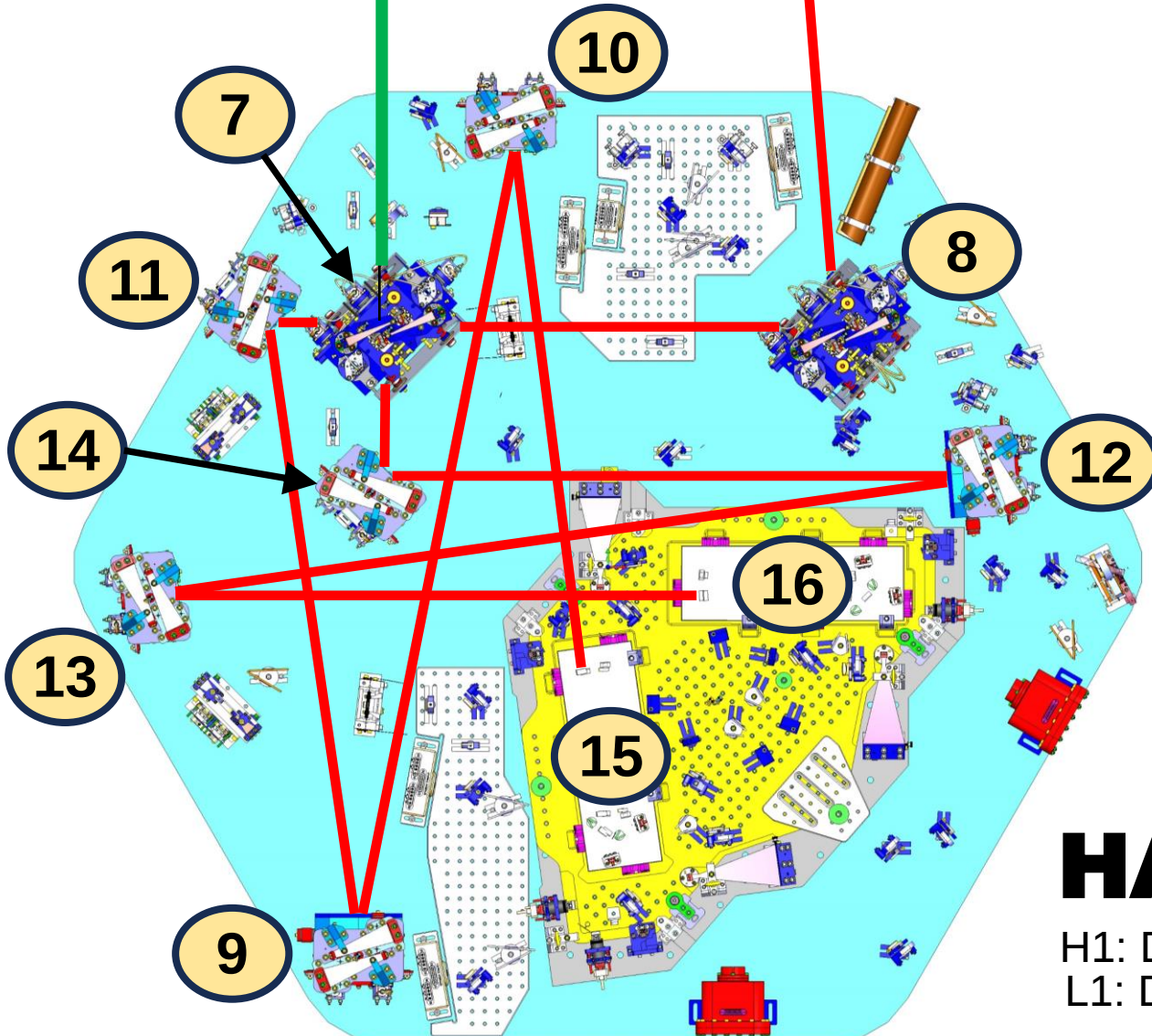
## HAM5

H1: D0901129  
L1: D0900456



## HAM6

H1: D0901822  
L1: D0901811



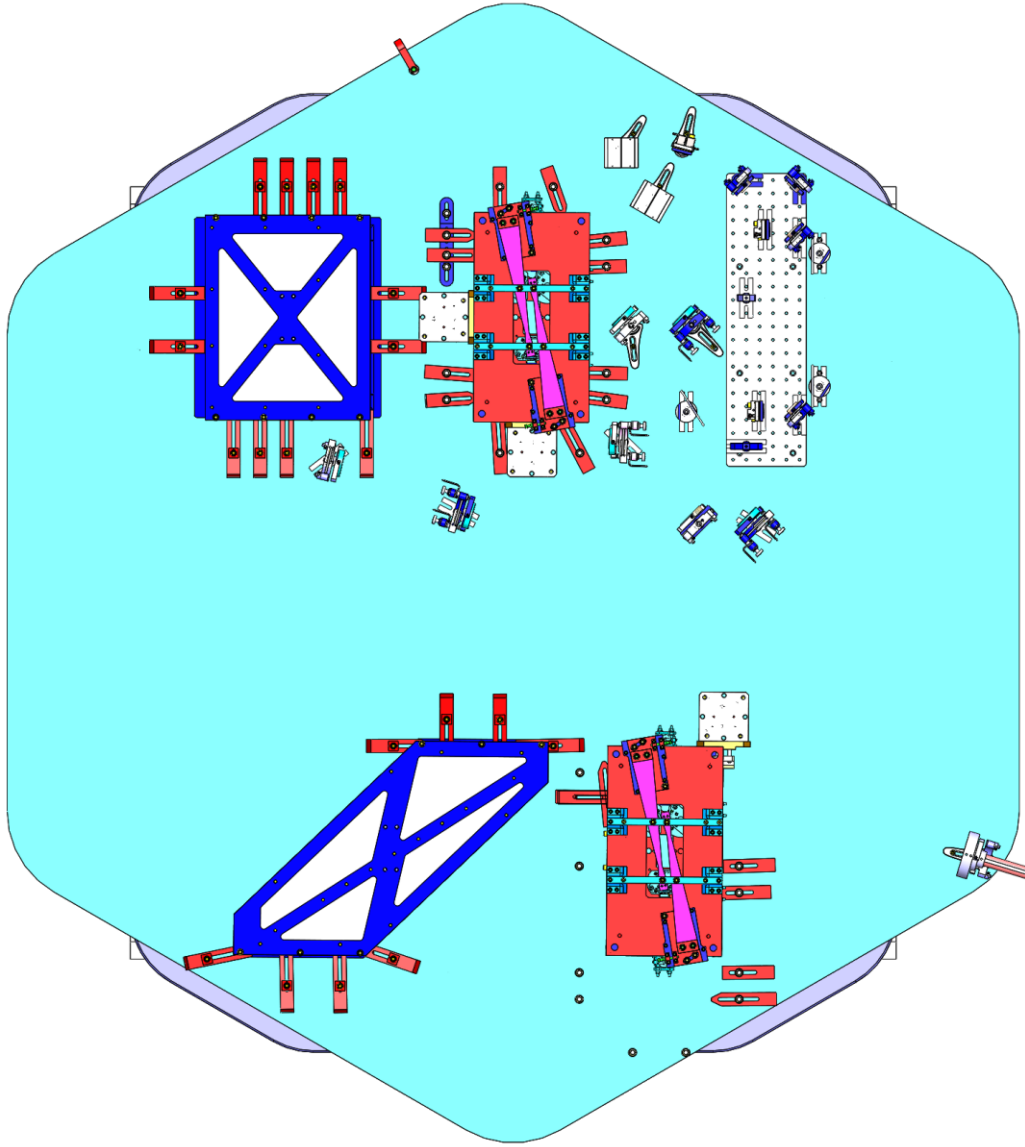
# A+ CONCEPTUAL DESIGN - 04

(Partial A+ integrated layout for observing run 04)

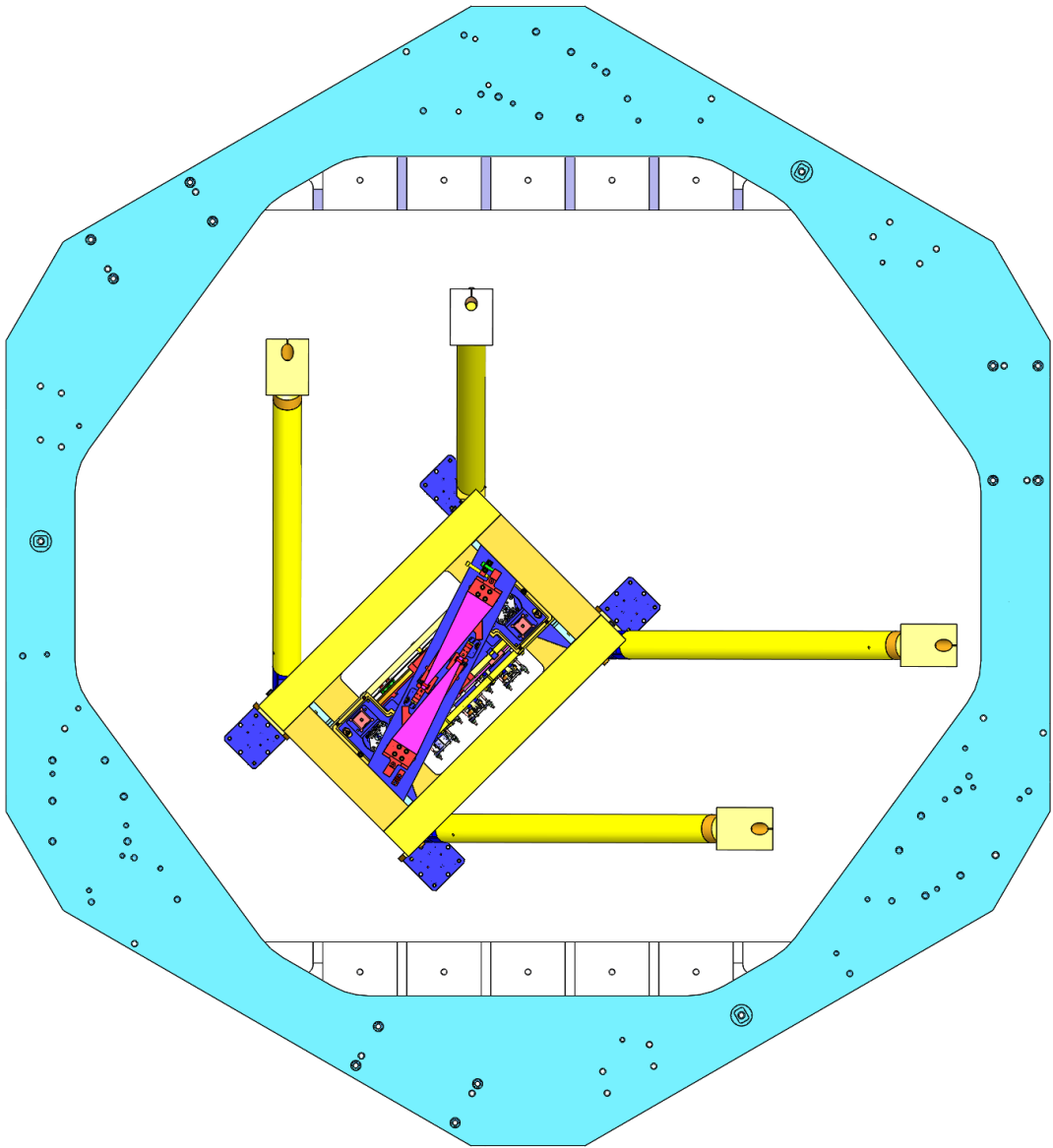
LIGO-D1800027-v28  
page 2 of 2

HAM8 FLANGE LAYOUT  
OF ELECTRICAL  
FEEDTHROUGHS  
L1: LIGO-D1900113  
H1: LIGO-D1900115

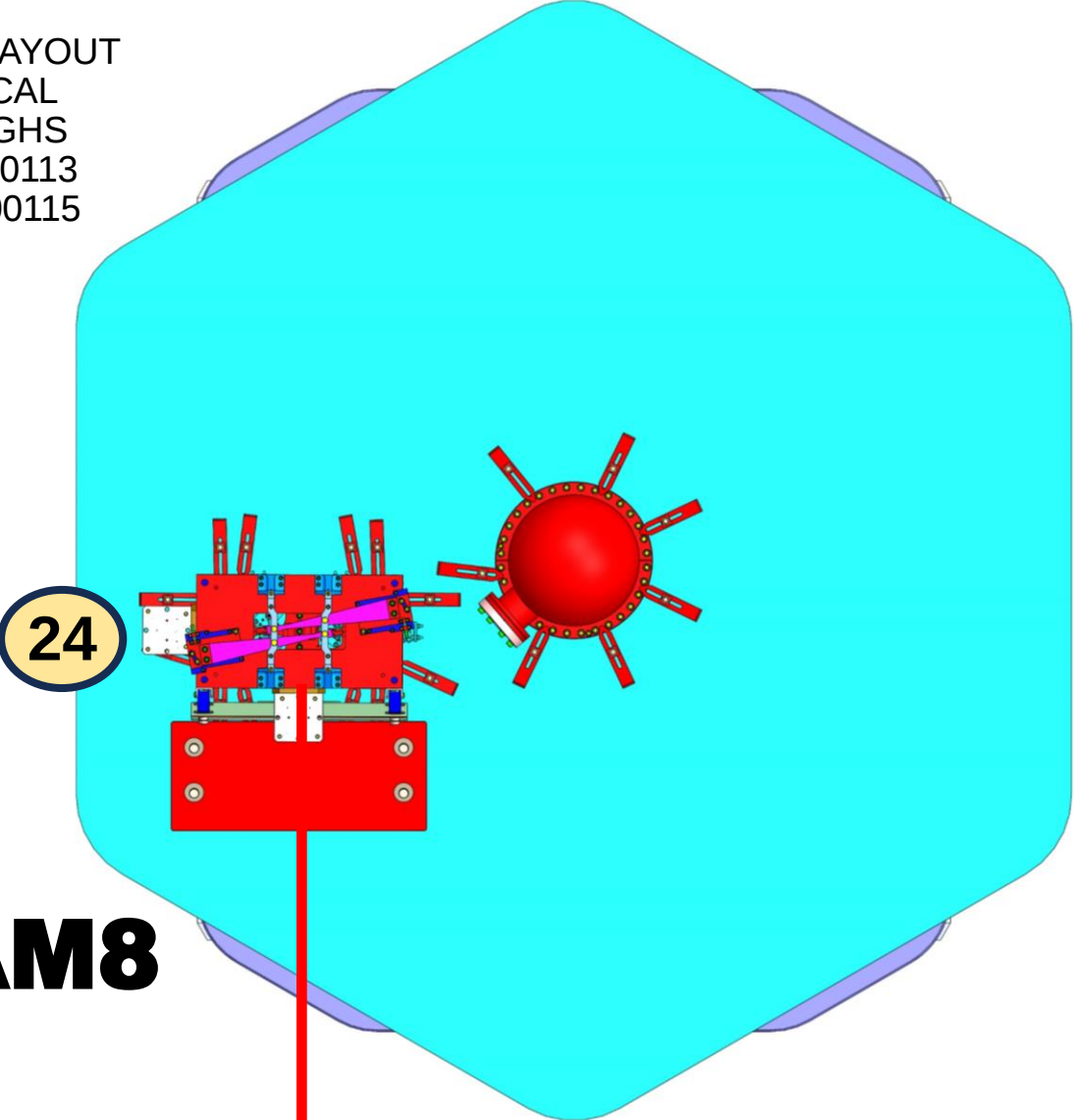
HAM3



BSC2

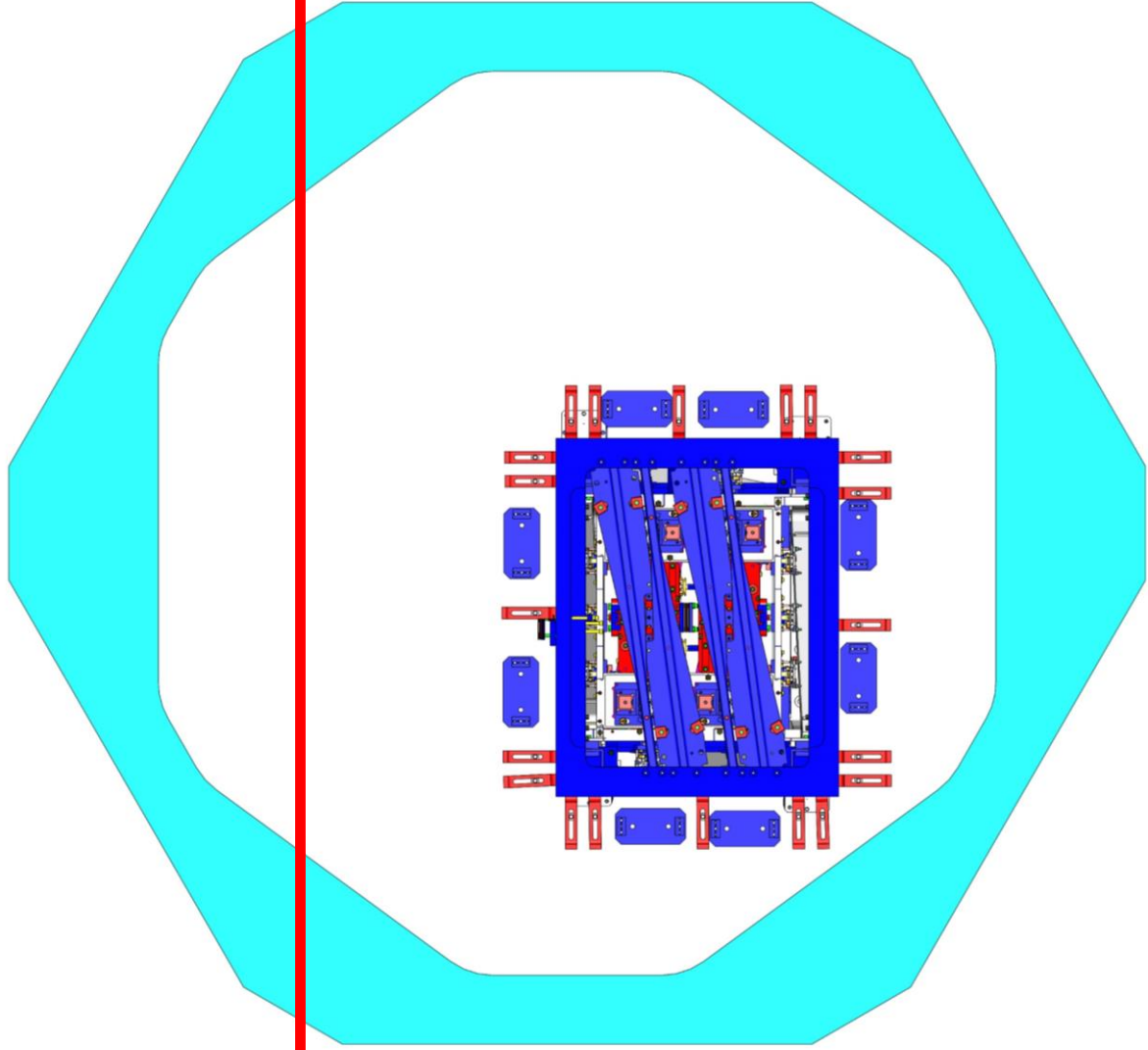


HAM8



~300m long filter cavity

BSC3



## DETAILS:

HAM3

BSC2

HAM4

HAM5

- 5 ZM6 (HSDS, Double SUS)
- 6 LOW LOSS FARADAY ISOLATOR

HAM6

- 25 OM1 (TIP-TILT)
- 26 OM2 (HTDS, Double SUS w/ Thermal SAMS)
- 27 OM3 (TIP-TILT)

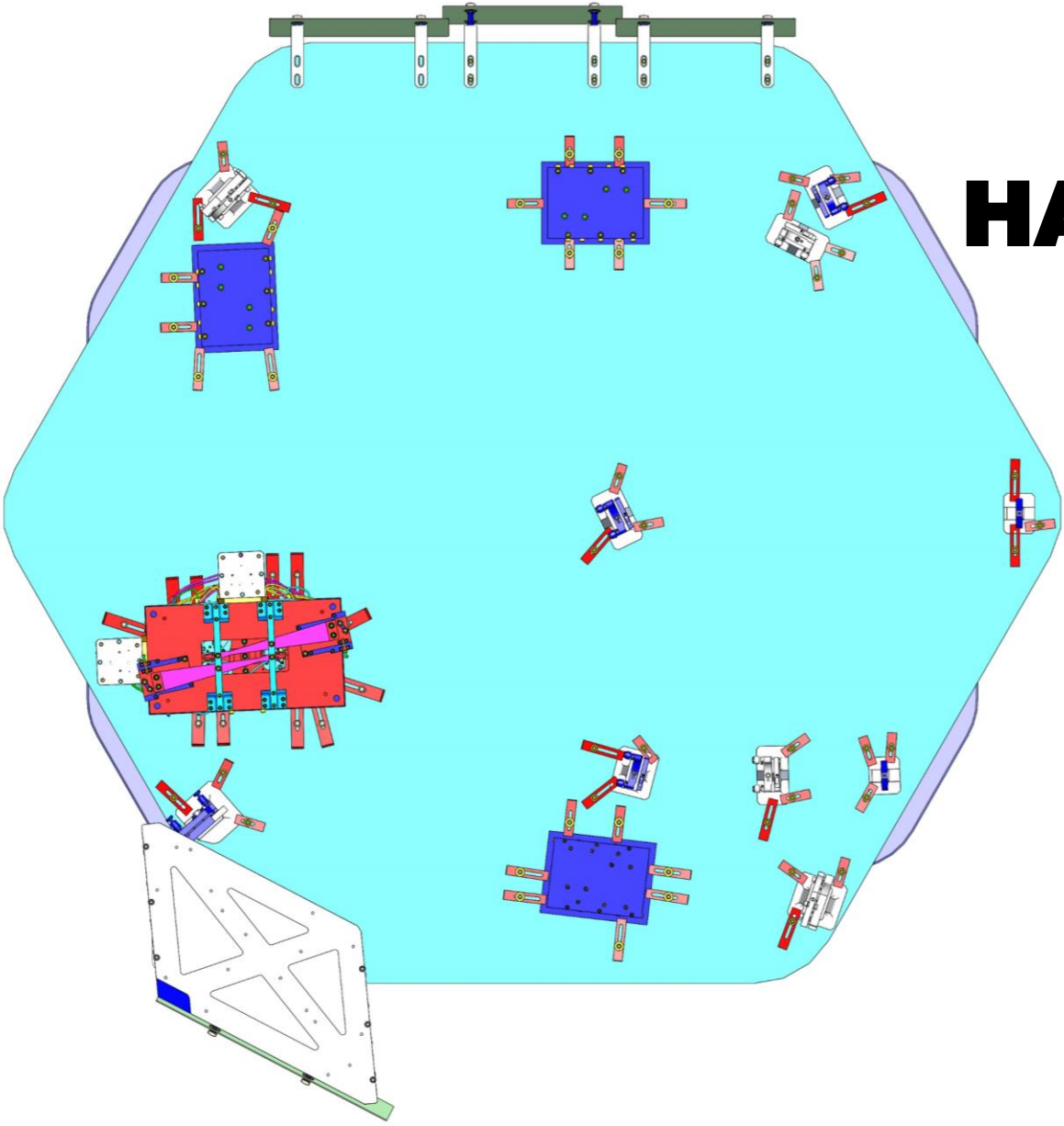
HAM7

- 18 ZM1 (HDDS, Double SUS w/ Dither)
- 19 ZM2 (HPDS, Double SUS w/ Piezo SAMS)
- 20 ZM3 (HDDS, Double SUS w/ Dither)
- 21 ZM4 (HPDS, Double SUS w/ Piezo SAMS)
- 22 ZM5 (HPDS, Double SUS w/ Piezo SAMS)
- 23 FC1 (HSTS TRIPLE, FILTER CAVITY)

HAM8

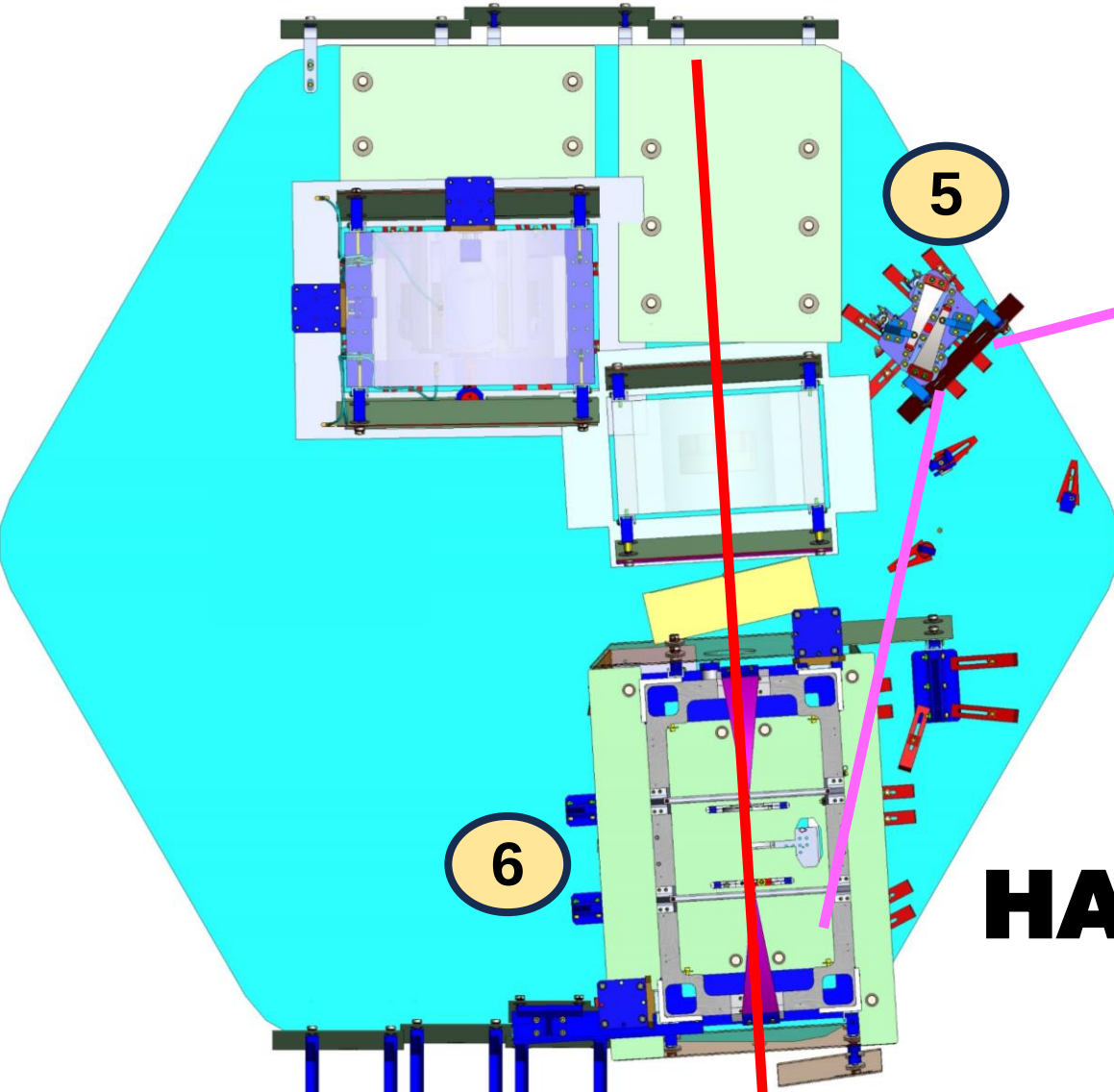
- 24 FC2 (HSTS TRIPLE, FILTER CAVITY)

HAM4



HAM7 FLANGE LAYOUT  
OF ELECTRICAL  
FEEDTHROUGHS  
L1: LIGO-D1900114  
H1: LIGO-D1900116

HAM5



HAM6

