Core Optics (COC)

- **Items to be stored :**
  - Two (2) End Reaction Mass (ERM) Store @ CIT
  - Four (4) Penultimate Masses (PM) Store @ LHO
  - Four (4) Test Masses (ITM and ETM)
  - Two (2) Compensation Plates (CP)
  - One (1) Beamsplitter (BS)
  - Two (2) Recycling Telescope Mirrors (PRM and SRM)

  } Store @ CIT

- **Specific concerns/requirements:**
  - Particulate and hydrocarbon contamination of optics and optical coatings
  - Degradation of gold plating on fused silica or glass substrates
  - Store so as to minimize number of cleanings after storage
- **Storage particulars**
  - Optics in their existing containers will be placed into designated storage in clean lab space (in air)

Advanced LIGO H1 Optical Layout

Optical parameters from LIGO-T0900043-06
Coordinates & wedges from D0901920-v13

February 25, 2013
P. Fritschel
E. Gustafson

D0902838-v4

Arm cavity length	3994.485 m
Power recycling cavity length	57.656 m
Signal recycling cavity length	56.008 m
Input mode cleaner round trip	32.9461 m
Schnupp asymmetry	80.0 mm
Modulation frequencies	f1 = 9.099471 MHz f2 = 45.497355 MHz
Gouy phases (one-way)	PRC: 25 ° SRC: 19 °
Polarization	IMC: vertical IFO: horizontal