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10-Nov-2014 23:37:53

Torsion Suspension (suspTorsion.m)

- torsion wire diameter (Silica, single wire): 1614.4104  $\mu\text{m}$
- torsion suspension wire length: 0.6 m
- torsion spring constant (2 wire): 0.028786 Nm/rad
- torsion bar inertia: 0.62492 kg $\cdot\text{m}^2$
- torsion resonance: 0.034158 Hz

You are not injecting squeezing..loozer!

- Seismic Isolator: MinusK
- Seismic Ground Motion: LL0
- Seismic Isolator: MinusK
- Seismic Ground Motion: LL0

Laser Power: 0.010 Watt

SRM Detuning: 0.00 degree

SRM transmission: 1.0000

ITM transmission: 0.0213

PRM transmission: 1.0000

Finesse: 294.71

Power Recycling Factor: 1.00

Arm power: 0.00 kW

Power on beam splitter: 0.01 W

Thermal load on ITM: 0.000 W

Thermal load on BS: 0.000 W

Required TCS efficiency: 1.000 (estimate, see IFOModel.m for definition)

BNS Inspiral Range: 0.000 Mpc

BBH Inspiral Range: 0.003 Mpc

Stochastic Omega: 9 Universes

New Nebulous Range: 1.244 Mpc

Bar length and diameter: 0.6 m x 0.06 m. (dumbell)

Bar mass (Aluminium,  $Q \sim 1.13\text{M}$ ): 13.911 kg

Bar and Suspension temperature: 293 K and 293 K.