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04-Nov-2014 15:21:55

Torsion Suspension (suspTorsion.m)

- torsion wire diameter (Silicon, single wire): 110.6333  $\mu\text{m}$
- torsion suspension wire length: 0.3 m
- torsion spring constant (2 wire): 0.0037851 Nm/rad
- torsion bar inertia: 0.0030487 kg\*m<sup>2</sup>
- torsion resonance: 0.17734 Hz

You are not injecting squeezing..loozer!

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

Laser Power: 1.000 Watt

SRM Detuning: 0.00 degree

SRM transmission: 1.0000

ITM transmission: 0.0140

PRM transmission: 1.0000

Finesse: 448.16

Power Recycling Factor: 1.00

Arm power: 0.14 kW

Power on beam splitter: 1.00 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: 0.001 Mpc

Stochastic Omega: 3e+03 Universes

New Nebulous Range: 0.043 Mpc

Bar length and diameter: 0.2 m x 0.05 m.

Bar mass (Silicon, Q~1e+03M): 0.9146 kg

Bar and Suspension temperature: 300 K and 300 K.