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22-May-2015 23:49:17

Torsion Suspension (suspTorsion.m)

- torsion suspension wire material: Silica
- torsion suspension wire loss angle:  $1e-10$
- torsion suspension wire temperature: 293 K
- torsion wire diameter (single wire, multiplied safety factor 1.5x): 400  $\mu\text{m}$
- torsion suspension wire length: 0.3 m
- torsion spring constant (2 wire): 0.18593 Nm/rad
- torsion bar inertia:  $4.0639\text{kg}\cdot\text{m}^2$
- torsion resonance: 0.034042 Hz

You are not injecting squeezing..loozer!

- Seismic Isolator: MultiSAS
- Seismic Ground Motion: LLO
- Seismic Isolator: MultiSAS
- Seismic Ground Motion: LLO

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: 0.001 Mpc

BBH Inspiral Range: 0.010 Mpc

Stochastic Omega: 0.5 Universes

New Nebulous Range: 6.292 Mpc

TORPEDO Configuration (nomm\_Masaki\_1m.m)

- Reference Cavity Length: 6.2 m
- Arm Lengths: 0.70711 m
- Bar length and diameter: 1 m x 0.1 m. (dumbell)
- Bar material: FusedSilica
- Bar material loss angle:  $1.32e+11$
- Bar temperature: 293 K
- Bar mass: 44.925 kg