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27-Jan-2015 21:16:35

Torsion Suspension (suspTorsion.m)

- torsion suspension wire material: Silica
- torsion suspension wire loss angle:  $4.1e-10$
- torsion suspension wire temperature: 293 K
- torsion wire diameter (single wire, multiplied safety factor 1.5x): 1614.4104  $\mu\text{m}$
- torsion suspension wire length: 0.6 m
- torsion spring constant (2 wire): 0.028786 Nm/rad
- torsion bar inertia:  $0.62492\text{kg}\cdot\text{m}^2$
- 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

TORPEDO Configuration (nomm\_anu\_pType1.m)

- Bar length and diameter: 0.6 m x 0.06 m. (dumbell)
- Bar material: Aluminium
- Bar material loss angle:  $1.13e+06$
- Bar temperature: 293 K
- Bar mass: 13.911 kg

