

ans =

18-May-2016 20:16:29

Torsion Suspension (suspTorpedo3.m)

- torsion suspension wire material: Tungsten
- torsion suspension wire loss angle:  $1e-07$
- torsion suspension wire temperature: 293 K
- torsion wire diameter (single wire, safety factor 1x): 500  $\mu\text{m}$
- torsion suspension wire length: 0.686 m
- torsion spring constant (2 wire): 0.026211 Nm/rad
- torsion bar inertia: 0.6508 kg\*m<sup>2</sup>
- torsion resonance: 0.03194 Hz

You are not injecting squeezing..loozer!

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

Laser Power: 0.100 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: 0.01 kW

Power on beam splitter: 0.10 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: 2e+03 Universes

New Nebulous Range: 0.080 Mpc

TORPEDO Configuration (nomm\_anu\_pType1\_v2.m)

- Reference Cavity Length: 0.2 m
- Arm Lengths: 0.368 m
- Bar length and diameter: 0.6 m x 0.06 m.
- Bar material: Aluminium
- Bar material loss angle:  $1.13e+06$
- Bar temperature: 293 K
- Bar mass: 4.5804 kg
- Bar Inertia: 0.13741 kg\*m<sup>2</sup>