

ans =

11-Apr-2015 22:18:13

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): 1568.3193  $\mu\text{m}$
- torsion suspension wire length: 0.6 m
- torsion spring constant (2 wire): 0.027166 Nm/rad
- torsion bar inertia:  $0.6392\text{kg}\cdot\text{m}^2$
- torsion resonance: 0.03281 Hz

You are not injecting squeezing..loozer!

- Seismic Isolator: MultiSAS
- Seismic Ground Motion: lowFsite
- Seismic Isolator: MultiSAS
- Seismic Ground Motion: lowFsite

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: 0.003 Mpc

Stochastic Omega: 8 Universes

New Nebulous Range: 1.319 Mpc

TORPEDO Configuration (nomm\_anu\_pType1.m)

- Reference Cavity Length: 6.2 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: 13.128 kg

