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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): 250  $\mu\text{m}$
- torsion suspension wire length: 0.686 m
- torsion spring constant (2 wire):  $0.026211+2.6211e-08i$  Nm/rad
- torsion bar inertia:  $0.6662\text{kg}\cdot\text{m}^2$
- torsion resonance:  $0.031569+1.5785e-08i$  Hz

You are not injecting squeezing..loozer!

- Seismic Isolator: T240
- Seismic Ground Motion: LL0
- Seismic Isolator: T240
- Seismic Ground Motion: LL0

Laser Power: 0.003 Watt  
SRM Detuning: 0.00 degree  
SRM transmission: 1.0000  
ITM transmission: 0.0213  
PRM transmission: 1.0000

seismicNN =

Seismic Newtonian Noise

Finesse: 294.71  
Power Recycling Factor: 1.00  
Arm power: 0.00 kW  
Power on beam splitter: 0.00 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:  $3e+02$  Universes

New Nebulous Range: 0.512 Mpc

TORPEDO Configuration (nomm\_anu\_pType1\_v4.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:  $8.86e-07$
- Bar temperature: 293 K
- Bar mass: 13.128 kg
- Bar Inertia:  $0.6662\text{kg}\cdot\text{m}^2$