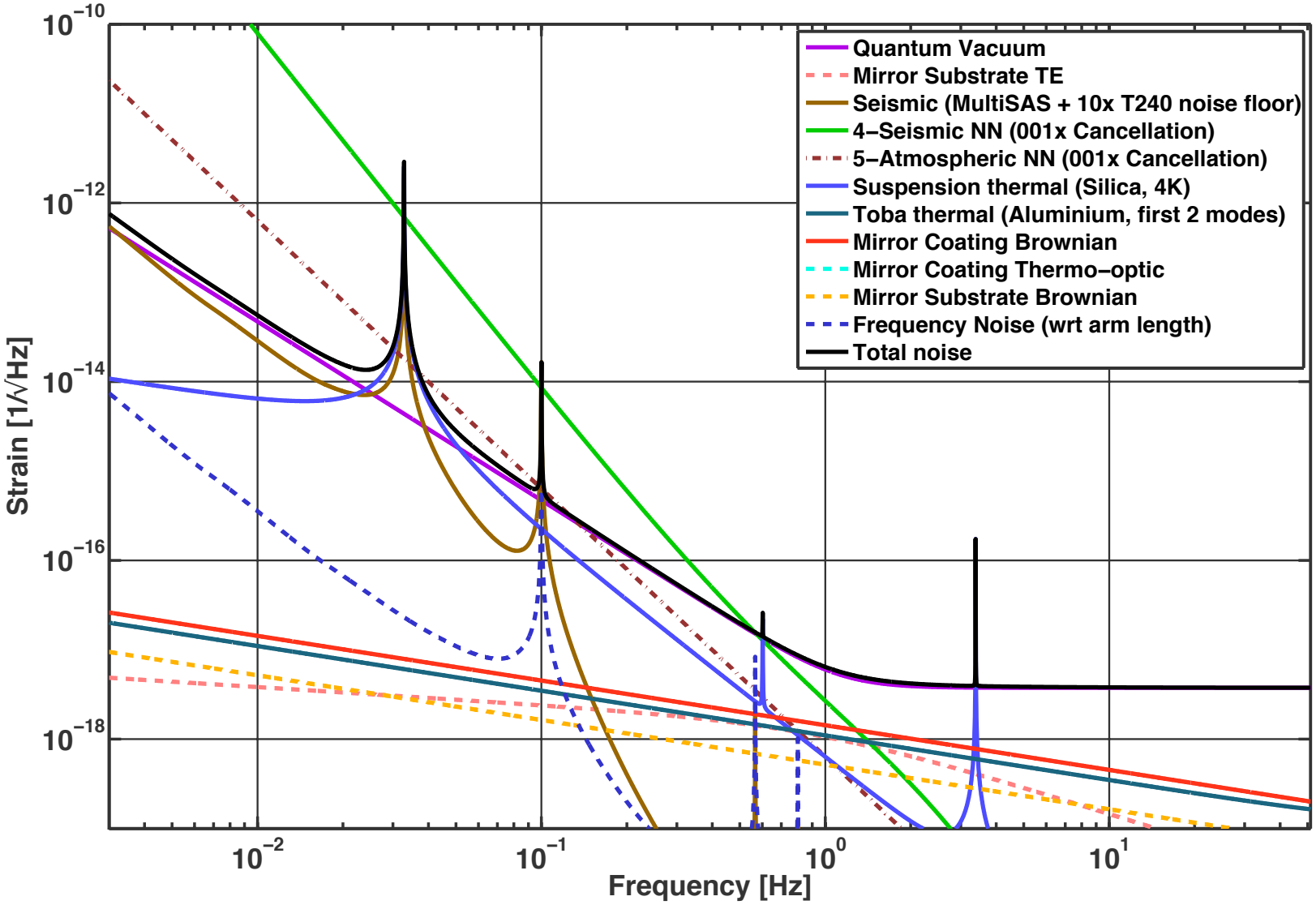
```
ans =

23-May-2015 00:11:38



ifo =

              Bar: [1x1 struct]
           Optics: [1x1 struct]
    Infrastructure: [1x1 struct]
        Constants: [1x1 struct]
              TCS: [1x1 struct]
          Seismic: [1x1 struct]
       Atmospheric: [1x1 struct]
        Suspension: [1x1 struct]
         Materials: [1x1 struct]
             Laser: [1x1 struct]
          Squeezer: [1x1 struct]
      OutputFilter: [1x1 struct]

Torsion Suspension (suspTorsion.m)
 - torsion suspension wire material: Silica
 - torsion suspension wire loss angle: 1e-10
 - torsion suspension wire temperature: 4 K
 - torsion wire diameter (single wire, multiplied safety factor 1.5x): 1568.3193
 um
 - torsion suspension wire length: 0.6 m
 - torsion spring constant (2 wire): 0.027166 Nm/rad
 - torsion bar inertia: 0.6392kg*m^2
 - torsion resonance: 0.03281 Hz
You are not injecting squeezing..loozer!
 - Seismic Isolator: MultiSAS
 - Seismic Ground Motion: LLO
 - Seismic Isolator: MultiSAS
 - Seismic Ground Motion: LLO
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
Reqired TCS efficiency:     1.000(estimate, see IFOModel.m for definition)
BNS Inspiral Range:        0.002 Mpc
BBH Inspiral Range:        0.028 Mpc
Stochastic Omega: 0.08 Universes

New Nebulous Range:      16.368 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: 3.91e+07
 - Bar temperature: 4 K
```

- Bar mass: 13.128 kg
- Bar Inertia: 0.6392 kg*m^2


Quantum Vacuum
Mirror Substrate TE
Seismic (MultiSAS + 10x T240 noise floor)
4–Seismic NN (001x Cancellation)
5–Atmospheric NN (001x Cancellation)
Suspension thermal (Silica, 4K)
Toba thermal (Aluminium, first 2 modes)
Mirror Coating Brownian
Mirror Coating Thermo–optic
Mirror Substrate Brownian
Frequency Noise (wrt arm length)
Total noise
Strain [1/√Hz]
Frequency [Hz]
10^−10
10^−12
10^−14
10^−16
10^−18
10^−2
10^−1
10^0
10^1