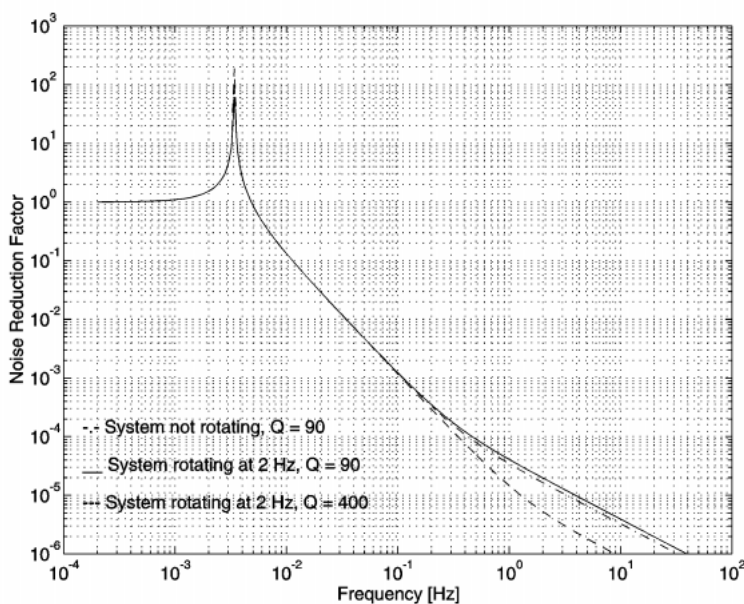
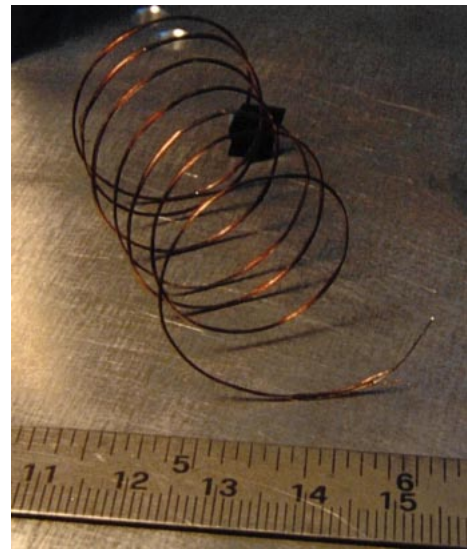
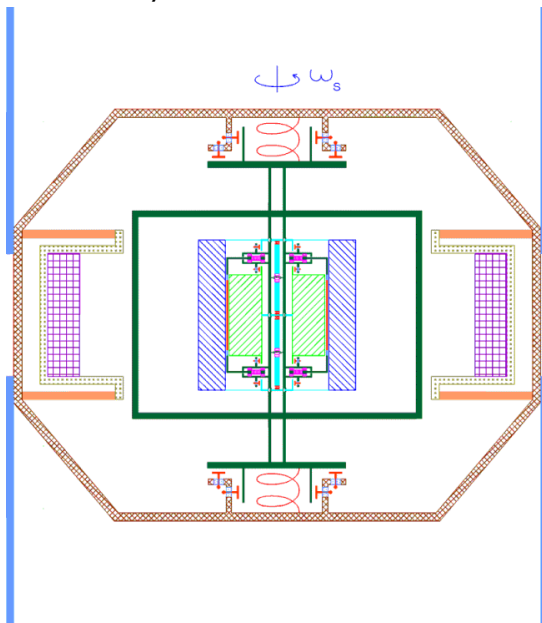


# Why the GG Design? The Pico Gravity Box (PGB): A Very Effective Noise-Free Platform Laboratory (IV)

The GG experiment is carried out inside the PGB, a mechanically suspended laboratory inside the spacecraft which provides effective attenuation of vibration noise above its natural frequency (low natural frequency, thanks to weightlessness)



Transfer function of the (spinning) PGB in the non-rotating frame. Spin frequency  $\gg$  natural frequency  
 $\downarrow$   
 very good vibration isolation close to spin frequency (sonic noise, noise induced by FEPP thrusters .....

PGB springs carry all needed electric wires

They provide electric discharging