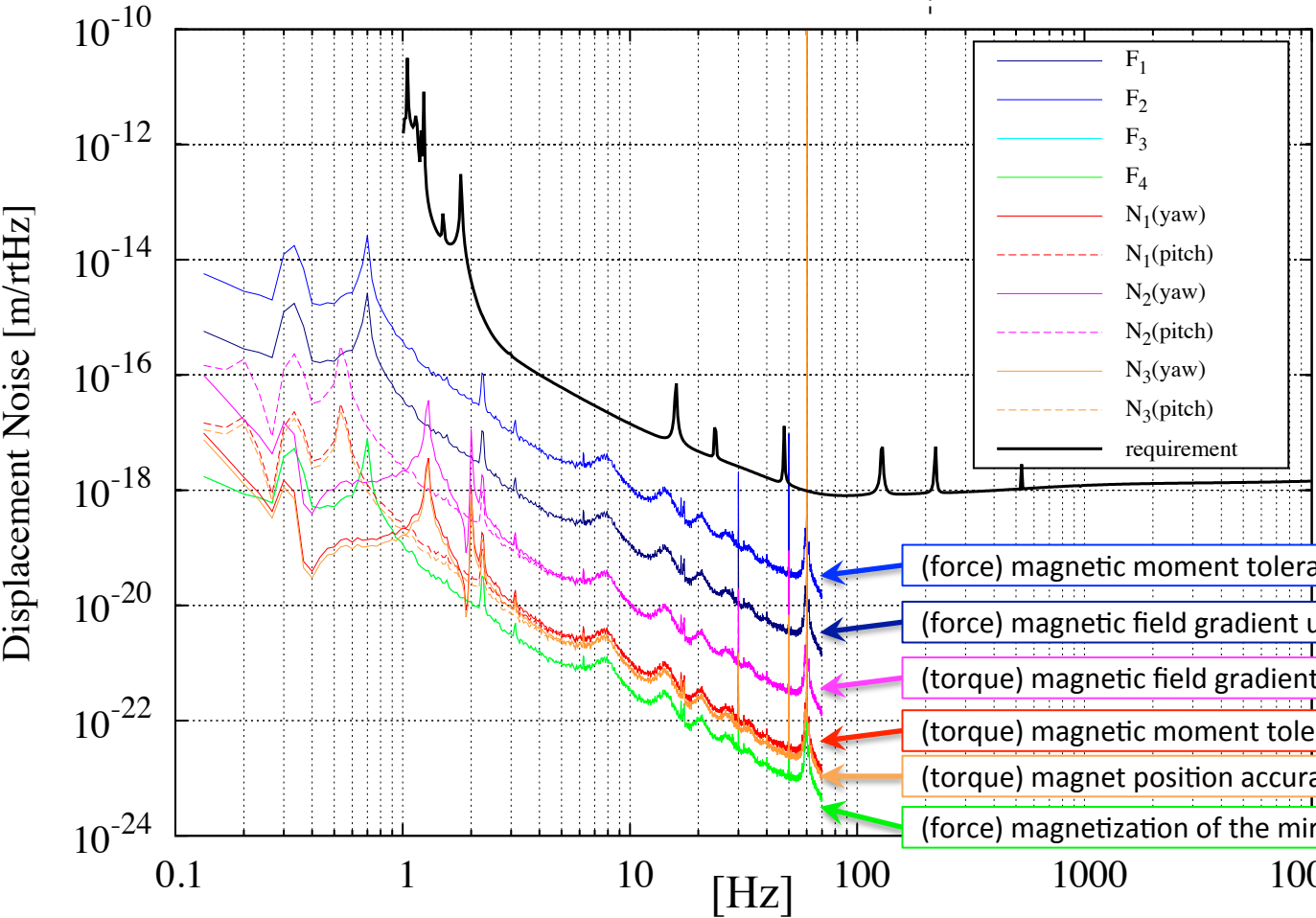
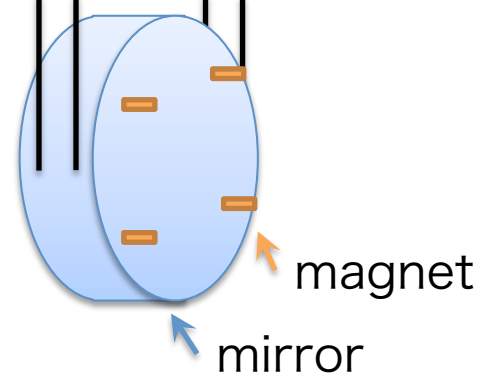
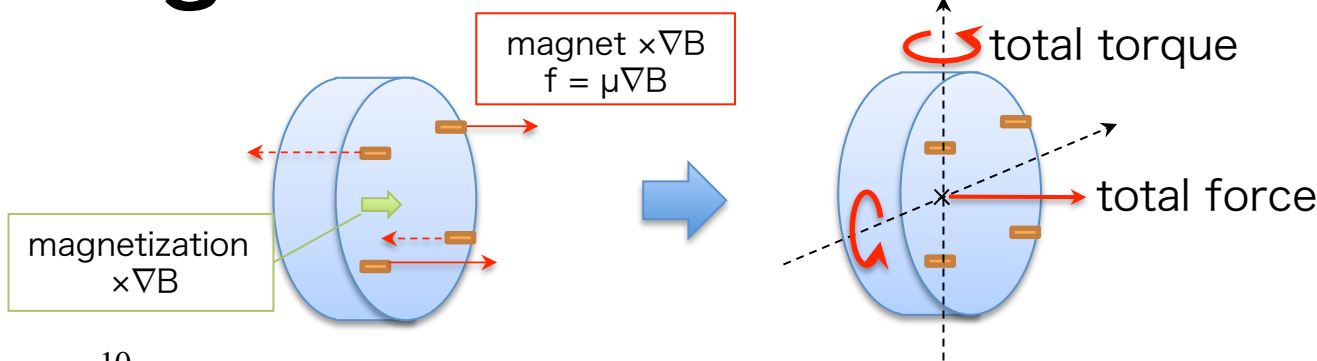


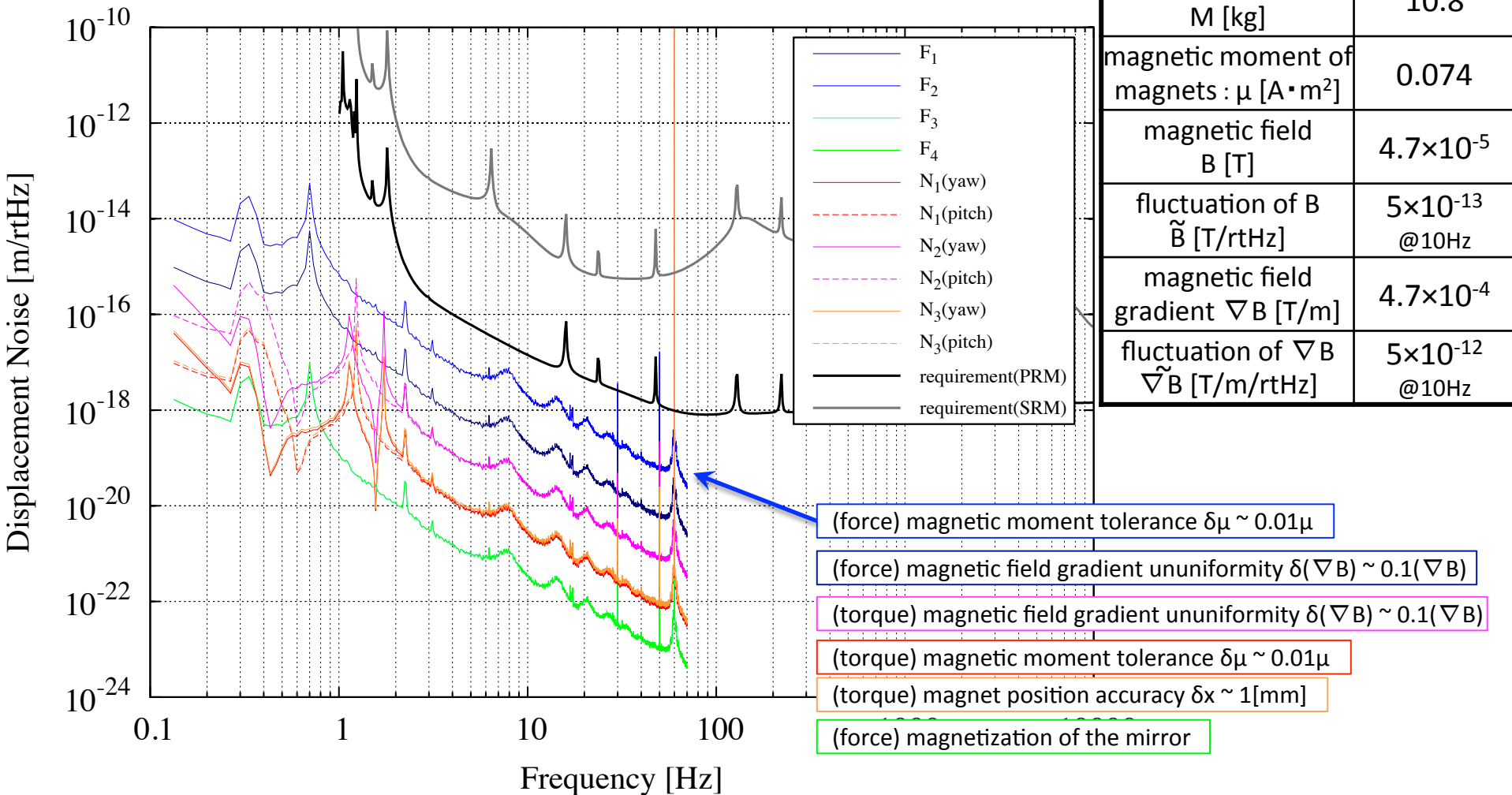
Magnetic noise for BS



parameter	value
mirror mass M [kg]	18.9
magnetic moment of magnets : μ [$A \cdot m^2$]	0.074
magnetic field B [T]	4.7×10^{-5}
fluctuation of B \tilde{B} [T/rtHz] @10Hz	5×10^{-13}
magnetic field gradient ∇B [T/m]	4.7×10^{-4}
fluctuation of ∇B $\tilde{\nabla B}$ [T/m/rtHz] @10Hz	5×10^{-12}

- (force) magnetic moment tolerance $\delta\mu \sim 0.01\mu$
- (force) magnetic field gradient ununiformity $\delta(\nabla B) \sim 0.1(\nabla B)$
- (torque) magnetic field gradient ununiformity $\delta(\nabla B) \sim 0.1(\nabla B)$
- (torque) magnetic moment tolerance $\delta\mu \sim 0.01\mu$
- (torque) magnet position accuracy $\delta x \sim 1[\text{mm}]$
- (force) magnetization of the mirror

Magnetic noise for PRM/SRM



Magnetic noise for ITM/ETM

