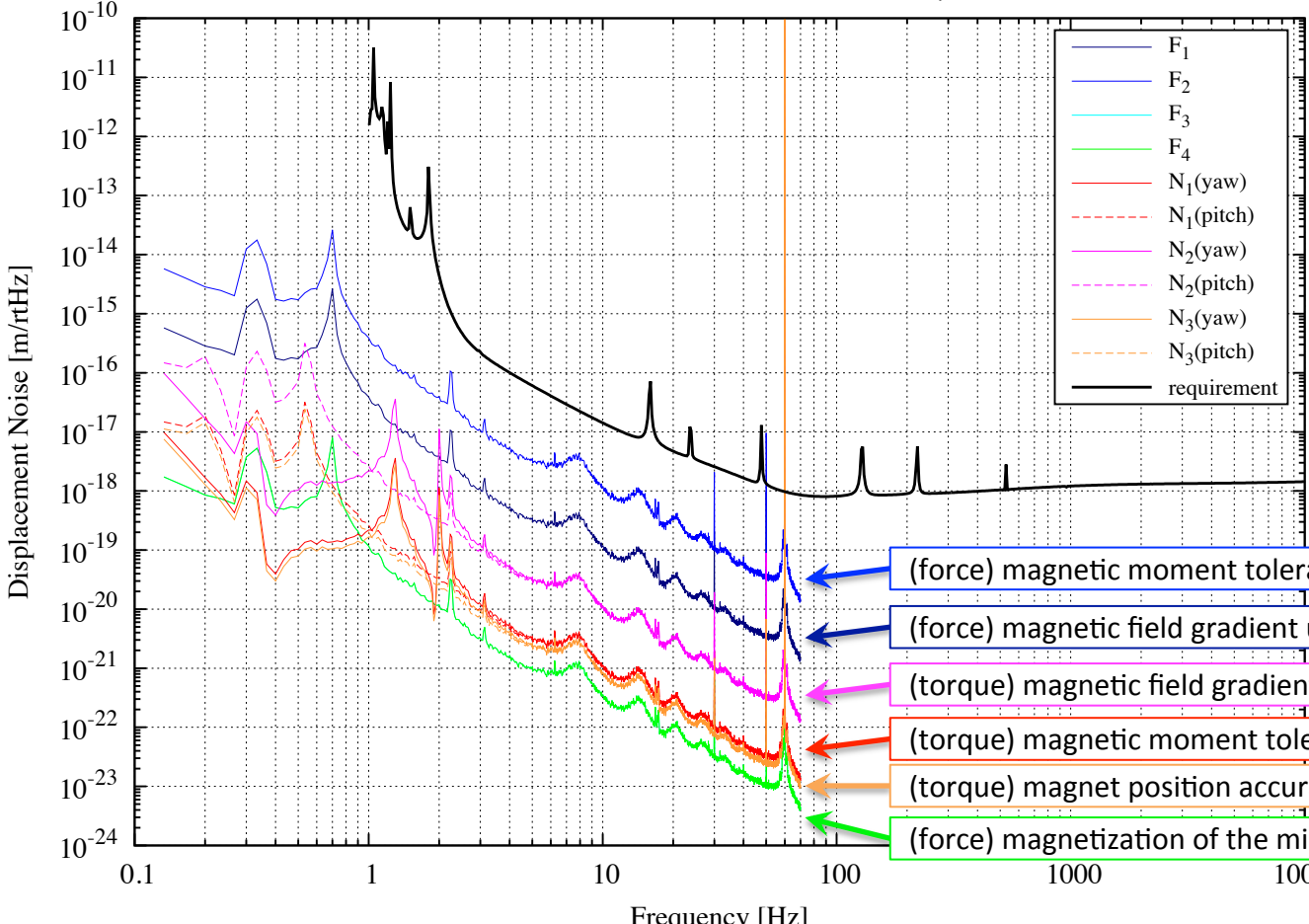
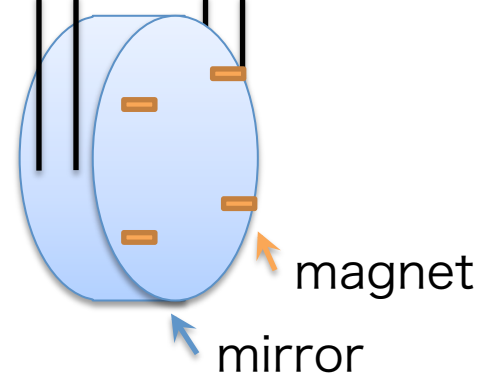
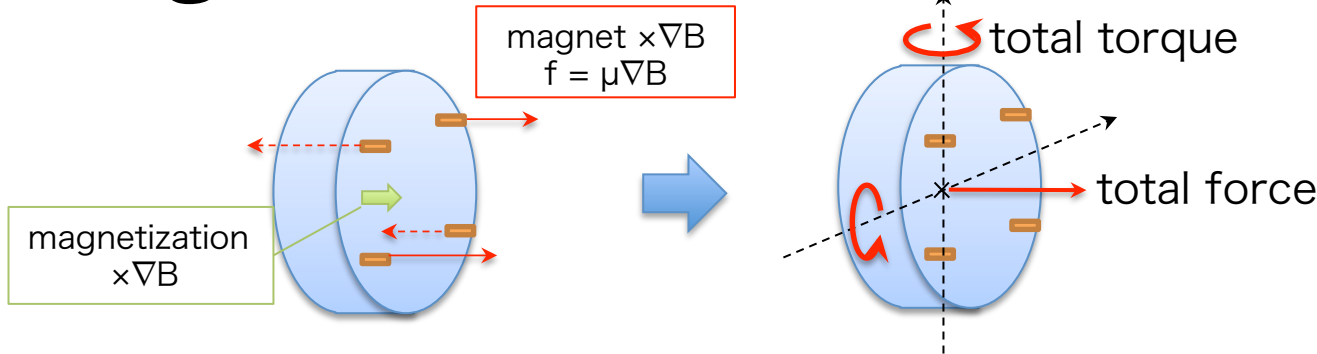
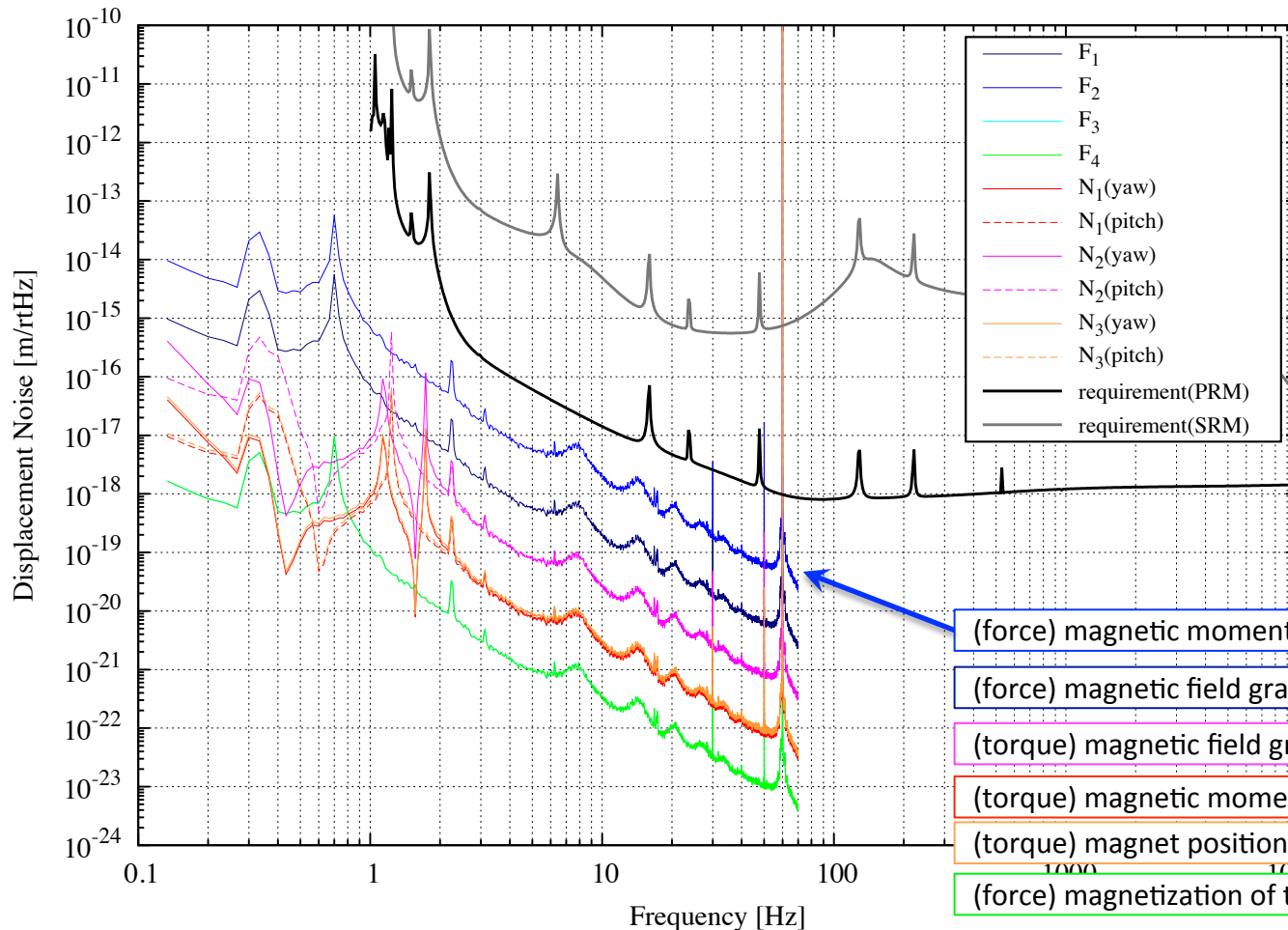


# Magnetic noise for BS



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

# Magnetic noise for PRM/SRM



parameter	value
mirror mass $M$ [kg]	10.8
magnetic moment of magnets : $\mu$ [ $A \cdot m^2$ ]	0.074
magnetic field $B$ [T]	$4.7 \times 10^{-5}$
fluctuation of $B$ $\tilde{B}$ [T/rtHz] @10Hz	$5 \times 10^{-13}$
magnetic field gradient $\nabla B$ [T/m]	$4.7 \times 10^{-4}$
fluctuation of $\nabla B$ $\tilde{\nabla B}$ [T/m/rtHz] @10Hz	$5 \times 10^{-12}$

(force) magnetic moment tolerance  $\delta\mu \sim 0.01\mu$

(force) magnetic field gradient ununiformity  $\delta(\nabla B) \sim 0.1(\nabla B)$

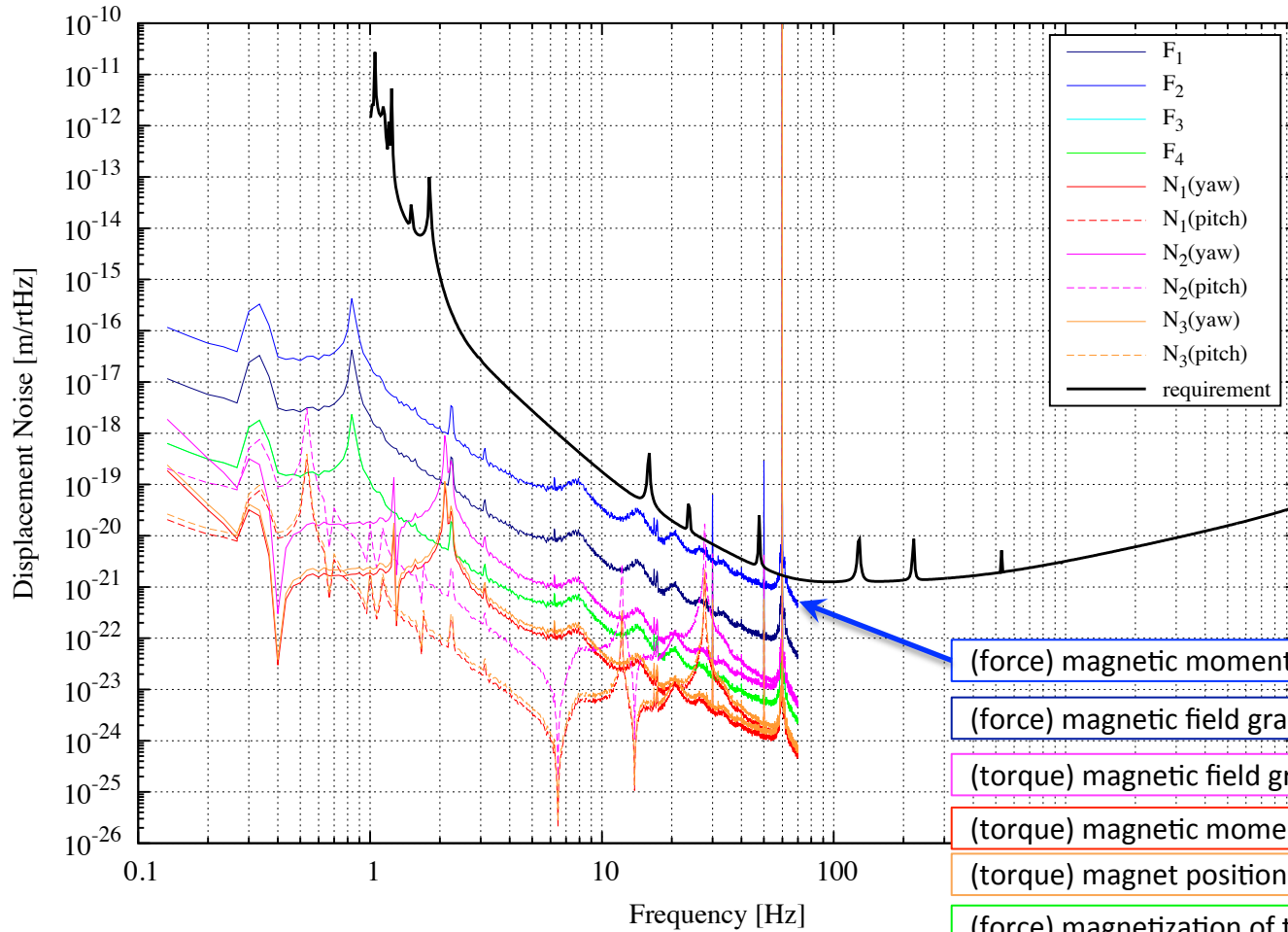
(torque) magnetic field gradient ununiformity  $\delta(\nabla B) \sim 0.1(\nabla B)$

(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 ITM/ETM



parameter	value
mirror mass M [kg]	22.7
magnetic moment of magnets : $\mu$ [ $A \cdot m^2$ ]	0.0027
magnetic field B [T]	$4.7 \times 10^{-5}$
fluctuation of B $\tilde{B}$ [T/rtHz]	$5 \times 10^{-13}$ @10Hz
magnetic field gradient $\nabla B$ [T/m]	$4.7 \times 10^{-4}$
fluctuation of $\nabla B$ $\tilde{\nabla B}$ [T/m/rtHz]	$5 \times 10^{-12}$ @10Hz

(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