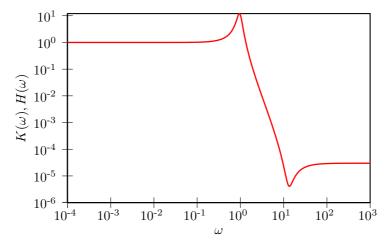
## GENERALIZED LANGEVIN EQUATION ANALYTICS

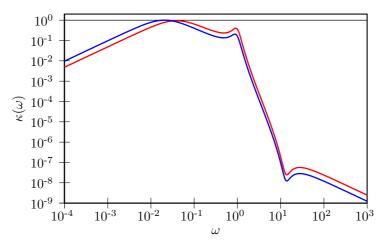
• Drift matrix  $A_p$ :

$$\begin{pmatrix} 1.2369 \times 10^{-06} & 3.6993 \times 10^{-01} & 2.3936 \times 10^{-03} \\ -3.6993 \times 10^{-01} & 1.8869 \times 10^{-04} & -9.6958 \times 10^{-01} \\ -3.5676 \times 10^{-03} & 9.6958 \times 10^{-01} & 2.8058 \times 10^{-01} \end{pmatrix}$$

- Fluctuation-Dissipation theorem is enforced,  $\mathbf{C}_p = k_B T$
- Memory kernel FT,  $K(\omega)/K(0) = H(\omega)/H(0)$



• Sampling efficiency, for  $q^2$  and  $p^2 + \omega^2 q^2$ :



• Free-particle diffusion coeff.  $(mD/k_BT)$ :  $2.4218 \times 10^{+01}$