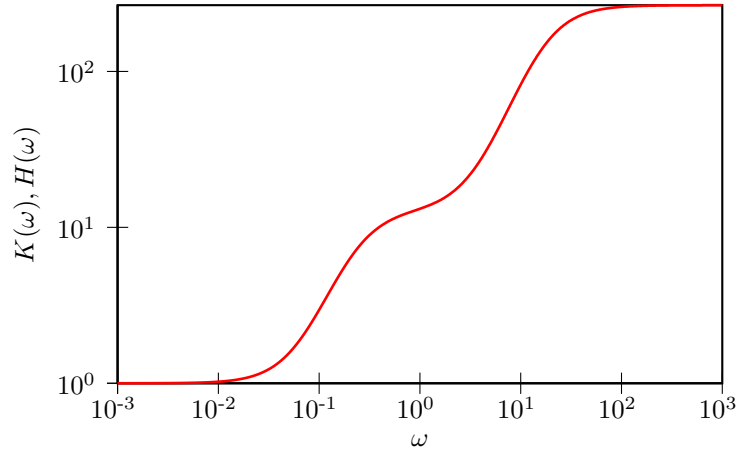


# GENERALIZED LANGEVIN EQUATION ANALYTICS

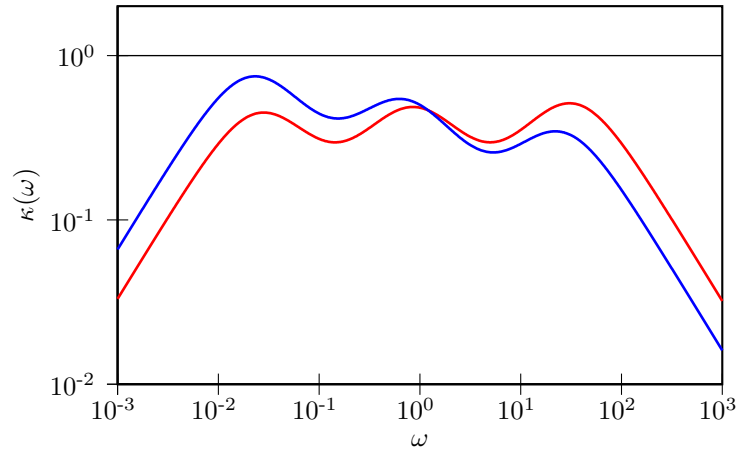
- Drift matrix  $A_p$ :

$$\begin{pmatrix} 1.6067 \times 10^{+01} & 3.5175 \times 10^{-01} & 1.5923 \times 10^{+01} \\ 4.5104 \times 10^{-01} & 2.2455 \times 10^{-01} & 1.0505 \times 10^{-02} \\ 1.5612 \times 10^{+01} & -1.0505 \times 10^{-02} & 1.6252 \times 10^{+01} \end{pmatrix}$$

- Fluctuation-Dissipation theorem is enforced,  $C_p = k_B T$
- 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. ( $mD/k_B T$ ):  $1.6555 \times 10^{+01}$