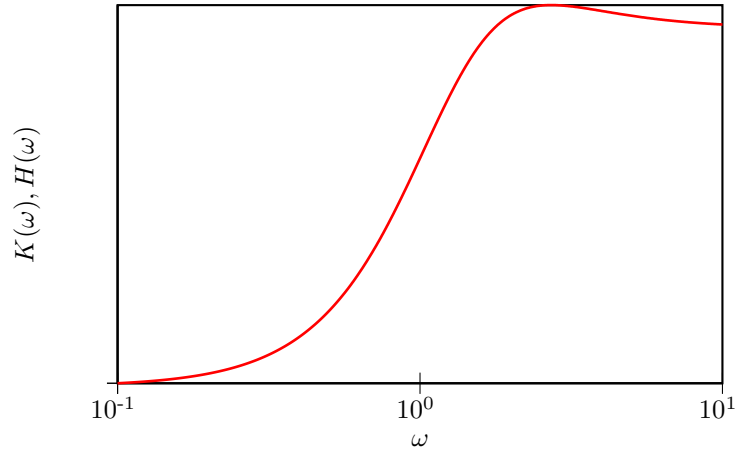


## GENERALIZED LANGEVIN EQUATION ANALYTICS

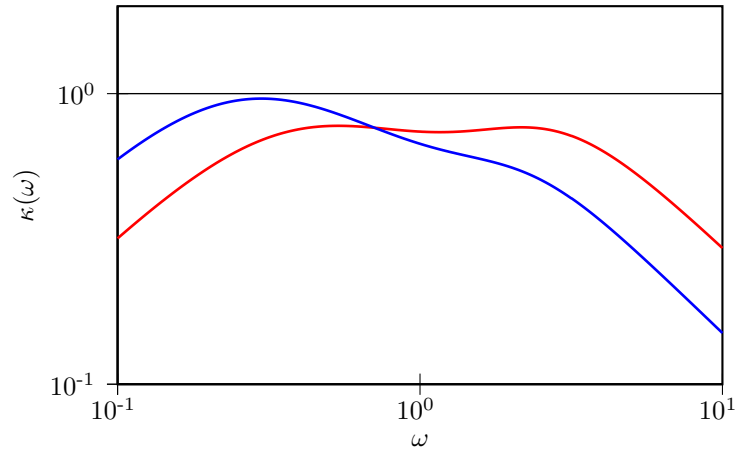
- Drift matrix  $A_p$ :

$$\begin{pmatrix} 1.5000 \times 10^{+00} & -6.5621 \times 10^{-01} & 3.4337 \times 10^{+00} \\ 5.4143 \times 10^{-01} & 1.5257 \times 10^{-01} & 1.3779 \times 10^{+00} \\ 1.7242 \times 10^{-01} & -1.3779 \times 10^{+00} & 2.2267 \times 10^{+00} \end{pmatrix}$$

- 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. ( $mD/k_B T$ ):  $1.6695 \times 10^{+00}$