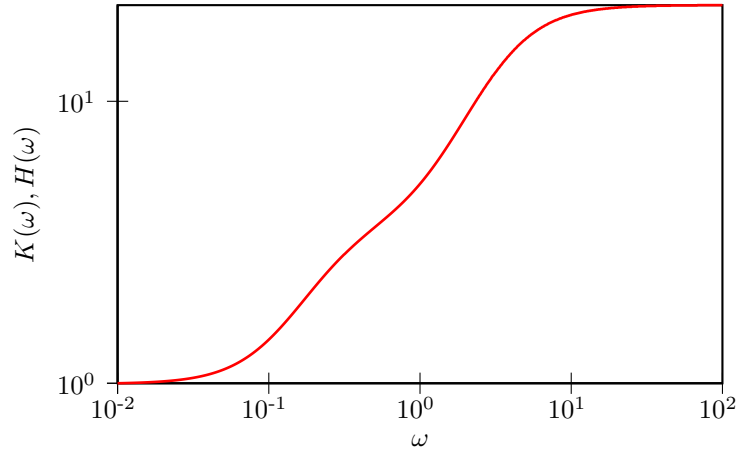


## GENERALIZED LANGEVIN EQUATION ANALYTICS

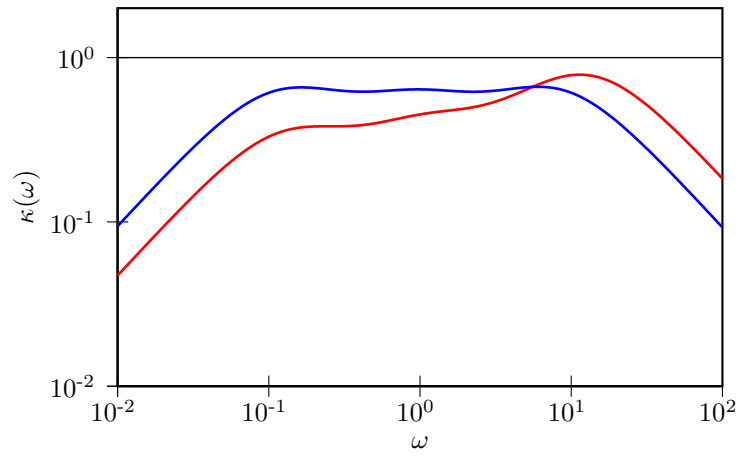
- Drift matrix  $A_p$ :

$$\begin{pmatrix} 9.3090 \times 10^{+00} & 4.2783 \times 10^{-02} & 6.6421 \times 10^{+00} \\ 7.2593 \times 10^{-01} & 1.9817 \times 10^{-01} & 2.9934 \times 10^{-01} \\ 3.7658 \times 10^{+00} & -2.9934 \times 10^{-01} & 3.2111 \times 10^{+00} \end{pmatrix}$$

- 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. ( $mD/k_B T$ ):  $2.3692 \times 10^{+00}$