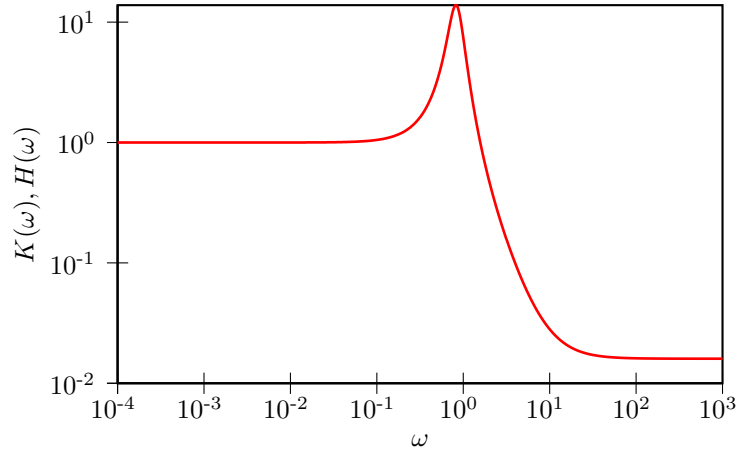


## GENERALIZED LANGEVIN EQUATION ANALYTICS

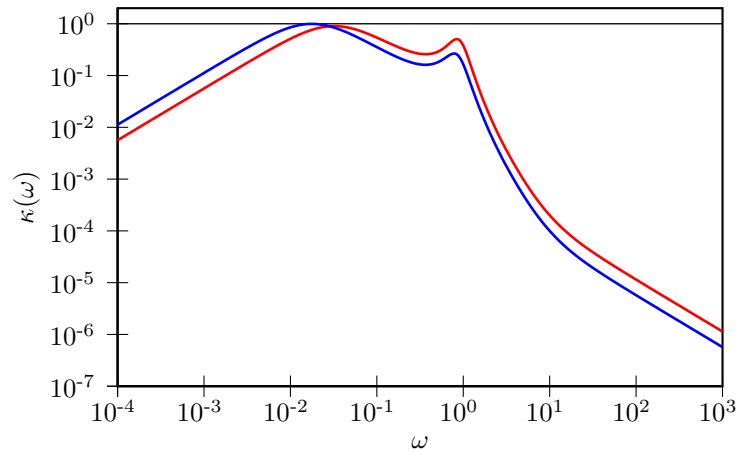
- Drift matrix  $A_p$ :

$$\begin{pmatrix} 5.6852 \times 10^{-04} & 2.9007 \times 10^{-01} & -3.0163 \times 10^{-01} \\ -2.8476 \times 10^{-01} & 6.3458 \times 10^{-02} & -8.2622 \times 10^{-01} \\ 3.2532 \times 10^{-01} & 8.2622 \times 10^{-01} & 3.0662 \times 10^{-01} \end{pmatrix}$$

- 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. ( $mD/k_B T$ ):  $2.8136 \times 10^{+01}$