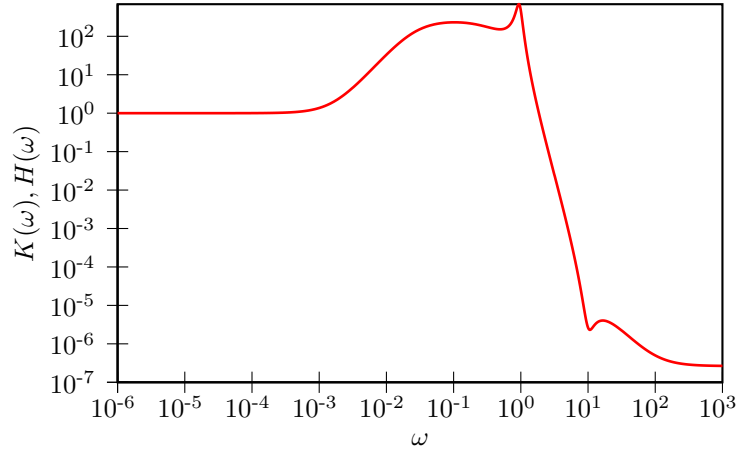


GENERALIZED LANGEVIN EQUATION ANALYTICS

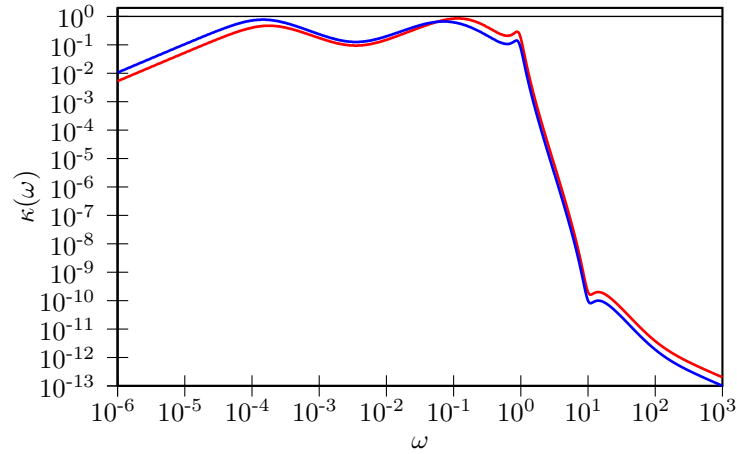
- Drift matrix A_p :

$$\begin{pmatrix} 1.0000 \times 10^{-10} & 2.6464 \times 10^{-01} & 4.3589 \times 10^{-02} & -1.6576 \times 10^{-02} & 1.2310 \times 10^{-03} \\ -2.6464 \times 10^{-01} & 2.1808 \times 10^{-07} & 3.1662 \times 10^{-02} & 7.6008 \times 10^{-01} & 2.0312 \times 10^{-02} \\ -4.3589 \times 10^{-02} & -3.1662 \times 10^{-02} & 2.7428 \times 10^{-05} & 1.1951 \times 10^{-01} & 1.4831 \times 10^{-01} \\ 1.6576 \times 10^{-02} & -7.6008 \times 10^{-01} & -1.1951 \times 10^{-01} & 3.9775 \times 10^{-05} & 6.1572 \times 10^{-01} \\ -1.2266 \times 10^{-03} & -2.0312 \times 10^{-02} & -1.4831 \times 10^{-01} & -6.1572 \times 10^{-01} & 5.6448 \times 10^{-01} \end{pmatrix}$$

- 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. ($mD/k_B T$): $2.6455 \times 10^{+03}$