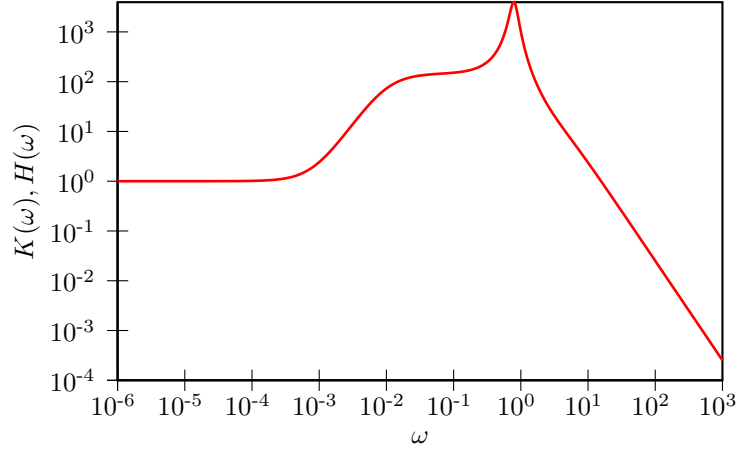


GENERALIZED LANGEVIN EQUATION ANALYTICS

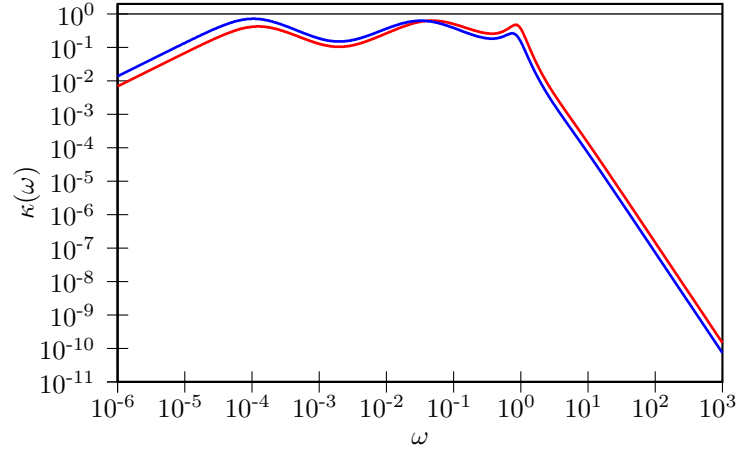
- Drift matrix A_p :

$$\begin{pmatrix} 1.0000 \times 10^{-10} & 7.2574 \times 10^{-02} & 3.6747 \times 10^{-01} & 3.6384 \times 10^{-01} & 1.1202 \times 10^{-01} \\ -7.2574 \times 10^{-02} & 2.6693 \times 10^{-05} & 1.7443 \times 10^{-01} & 2.2017 \times 10^{-02} & -1.0764 \times 10^{-02} \\ -3.6747 \times 10^{-01} & -1.7443 \times 10^{-01} & 9.9671 \times 10^{-04} & -7.6236 \times 10^{-01} & -3.1958 \times 10^{-01} \\ -3.6384 \times 10^{-01} & -2.2017 \times 10^{-02} & 7.6236 \times 10^{-01} & 1.2462 \times 10^{-01} & -6.7597 \times 10^{-01} \\ -1.1200 \times 10^{-01} & 1.0764 \times 10^{-02} & 3.1958 \times 10^{-01} & 6.7597 \times 10^{-01} & 4.5222 \times 10^{+00} \end{pmatrix}$$

- 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. ($mD/k_B T$): $3.4272 \times 10^{+03}$