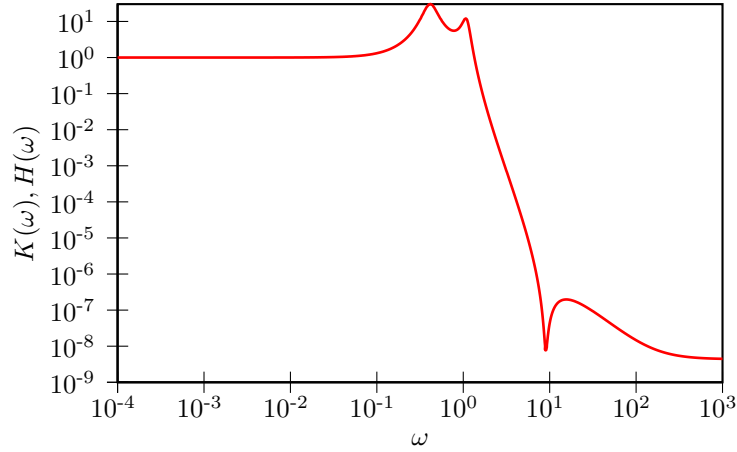


GENERALIZED LANGEVIN EQUATION ANALYTICS

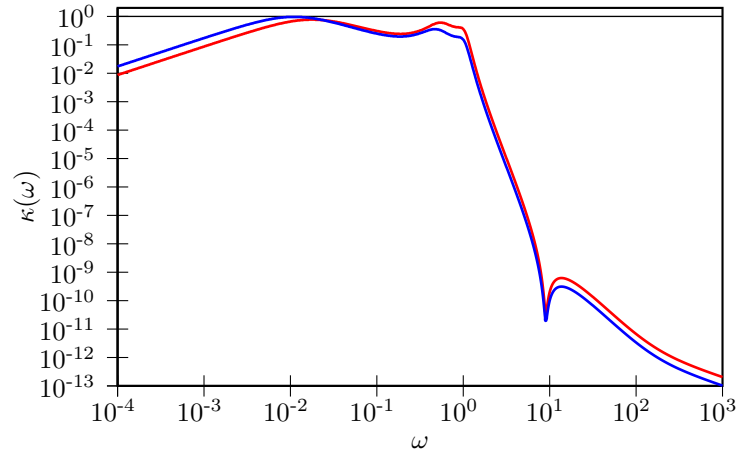
- Drift matrix A_p :

$$\begin{pmatrix} 1.0000 \times 10^{-10} & 2.0668 \times 10^{-01} & -2.6975 \times 10^{-01} & 2.2835 \times 10^{-01} & 2.4225 \times 10^{-03} \\ -2.0668 \times 10^{-01} & 4.3237 \times 10^{-10} & -7.5446 \times 10^{-01} & 1.4150 \times 10^{-01} & -7.3749 \times 10^{-01} \\ 2.6975 \times 10^{-01} & 7.5446 \times 10^{-01} & 7.4958 \times 10^{-08} & 1.2524 \times 10^{-01} & -1.3515 \times 10^{-01} \\ -2.2835 \times 10^{-01} & -1.4150 \times 10^{-01} & -1.2524 \times 10^{-01} & 7.7805 \times 10^{-08} & 5.0716 \times 10^{-01} \\ -2.4300 \times 10^{-03} & 7.3749 \times 10^{-01} & 1.3515 \times 10^{-01} & -5.0716 \times 10^{-01} & 4.0682 \times 10^{-01} \end{pmatrix}$$

- 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. ($mD/k_B T$): $4.3617 \times 10^{+01}$