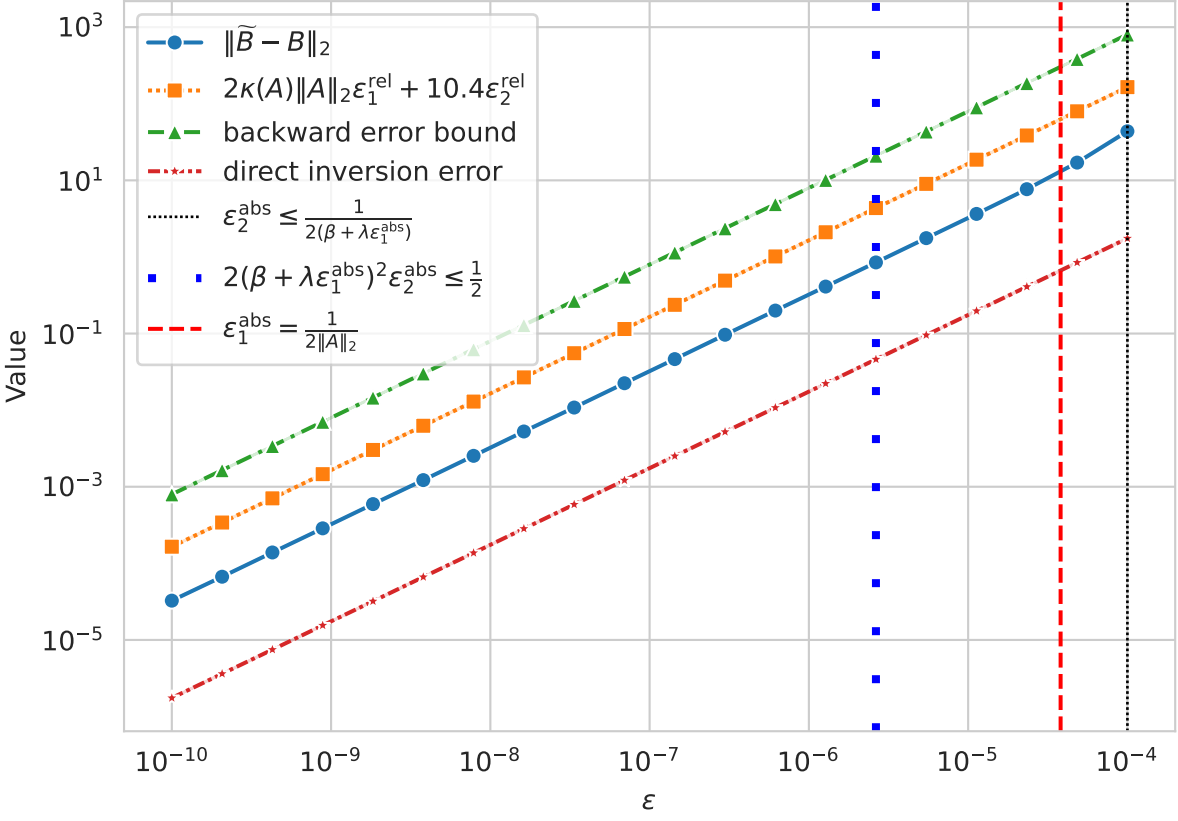
Backward Error n = 1000, k = 20, $\lambda = 0.4 \cdot \sigma_{\max}(A)$
$\|\widetilde{B} - B\|_2$
$2\kappa(A)\|A\|_2\varepsilon_1^{\text{rel}} + 10.4\varepsilon_2^{\text{rel}}$
backward error bound
direct inversion error
$\varepsilon_2^{\text{abs}} \leq \frac{1}{2(\beta + \lambda\varepsilon_1^{\text{abs}})}$
$2(\beta + \lambda\varepsilon_1^{\text{abs}})^2\varepsilon_2^{\text{abs}} \leq \frac{1}{2}$
$\varepsilon_1^{\text{abs}} = \frac{1}{2\|A\|_2}$
Value
ε
10^{3}
10^{1}
10^{-1}
10^{-3}
10^{-5}
10^{-10}
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}