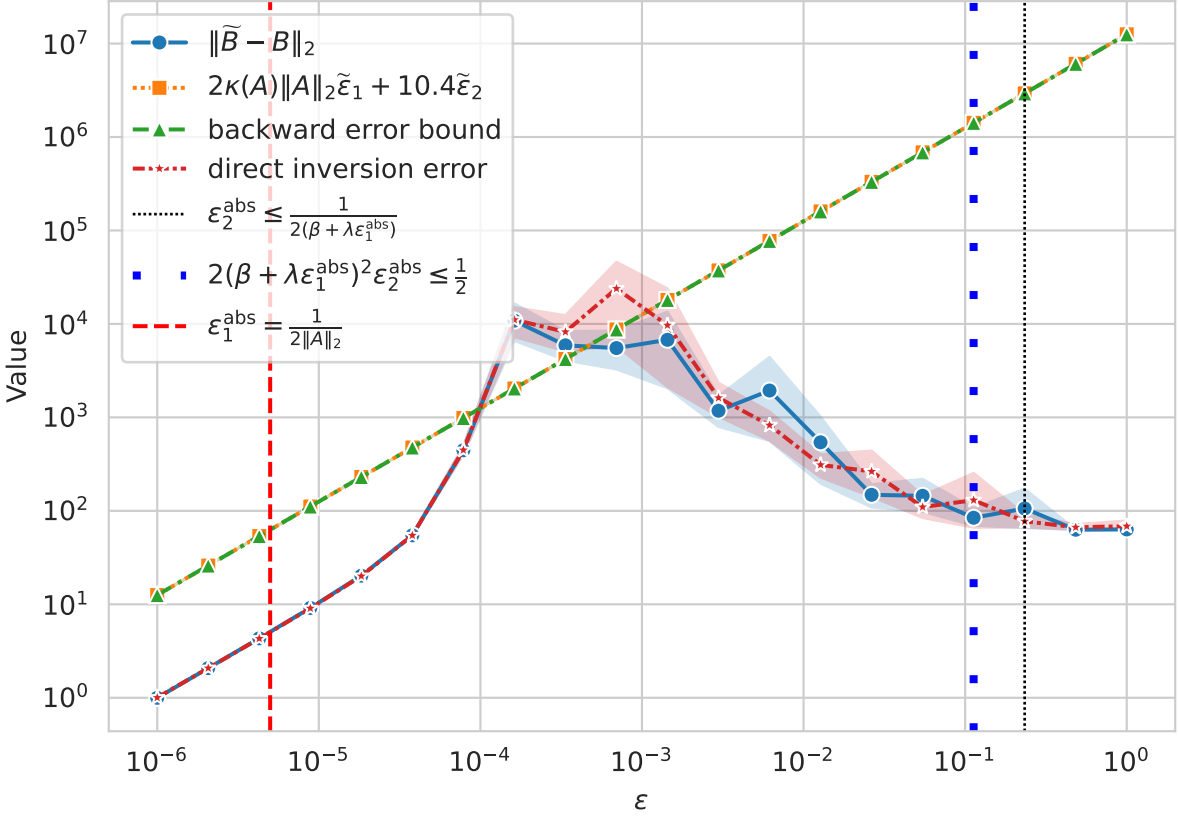
Backward Error n = 1000, k = 20, cond(A) = 100000.0, λ = 0.4 ·σmin(A
$\|\widetilde{B} - B\|_2$
$2\kappa(A)\|A\|_2\widetilde{\varepsilon}_1 + 10.4\widetilde{\varepsilon}_2$
backward error bound
direct inversion error
$\varepsilon_2^{\text{abs}} \leq \frac{1}{2(\beta + \lambda\varepsilon_1^{\text{abs}})}$
$2(\beta + \lambda\varepsilon_1^{\text{abs}})^2\varepsilon_2^{\text{abs}} \leq \frac{1}{2}$
$\varepsilon_1^{\text{abs}} = \frac{1}{2\|A\|_2}$
Value
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7
10^{-6}
10^{-5}
10^{-4}
10^{-3}
10^{-2}
10^{-1}
10^0
ε