$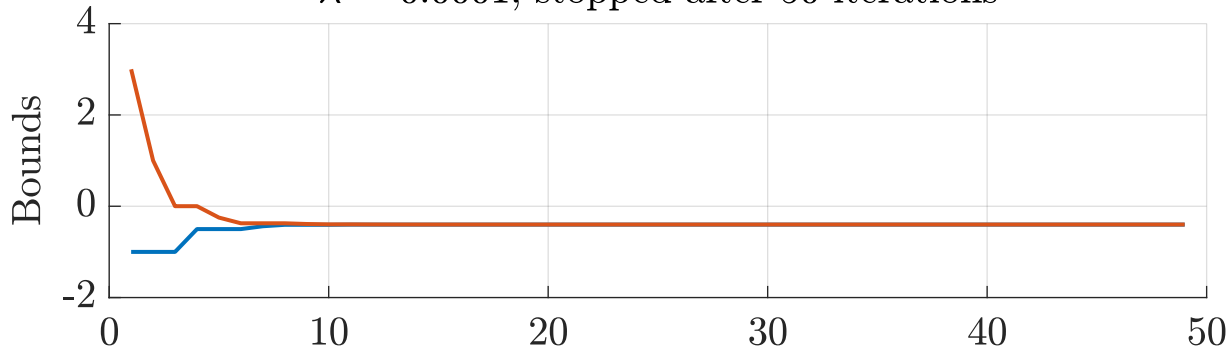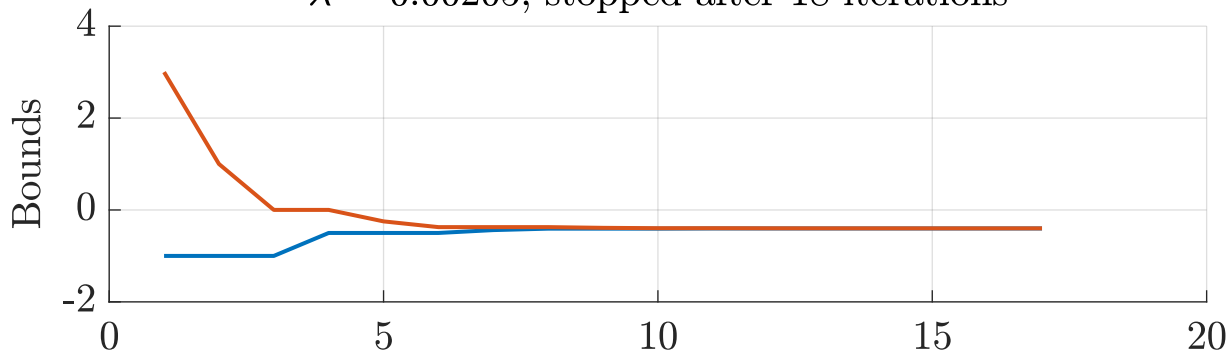f_2$ upper and lower bounds for varying λ, $\epsilon = 0.001$