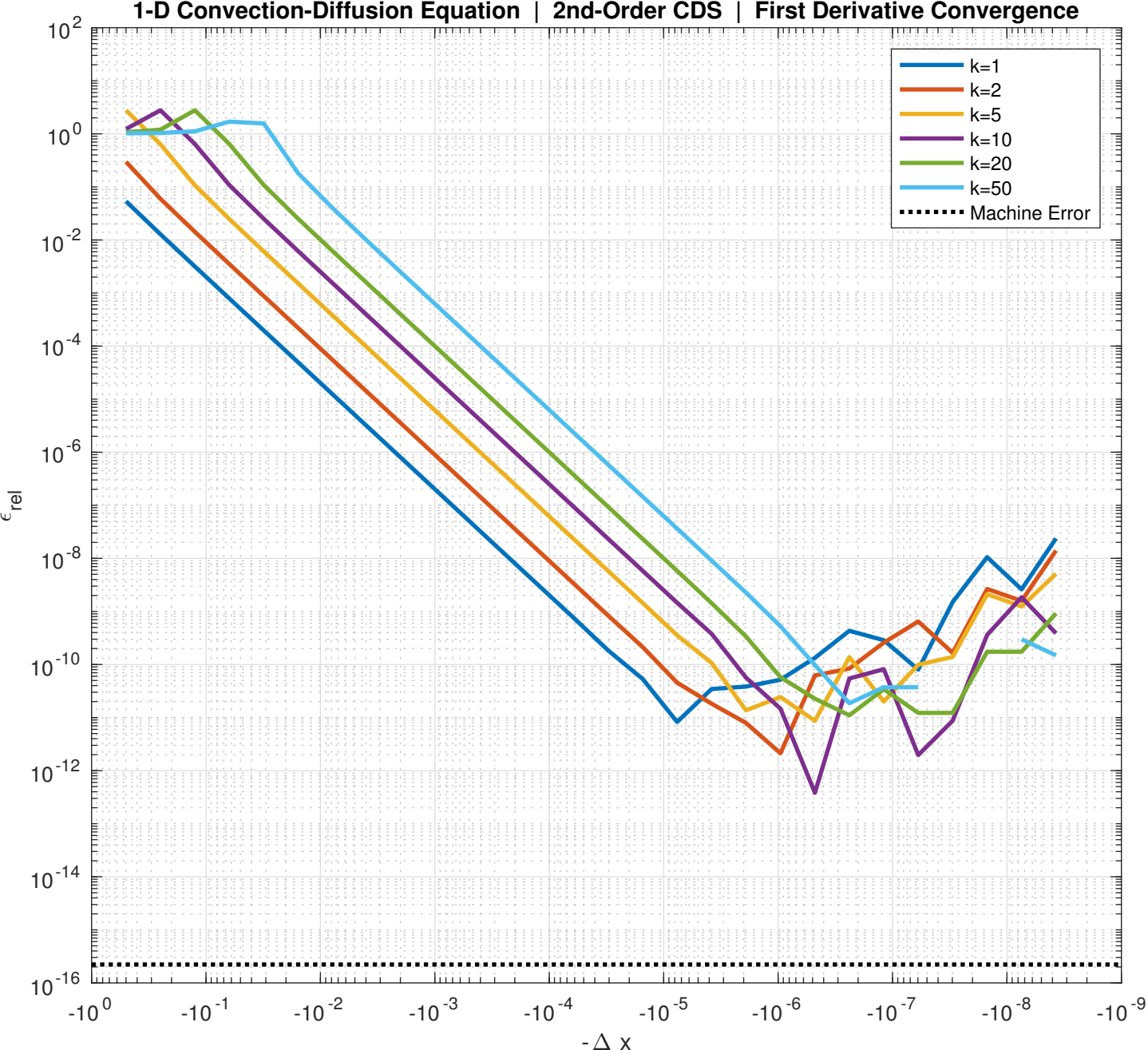
1-D Convection-Diffusion Equation | 2nd-Order CDS | First Derivative Convergence
k=1
k=2
k=5
k=10
k=20
k=50
Machine Error
ϵ_{rel}
10^{2}
10^{0}
10^{-2}
10^{-4}
10^{-6}
10^{-8}
10^{-10}
10^{-12}
10^{-14}
10^{-16}
-10^{0}
-10^{-1}
-10^{-2}
-10^{-3}
-10^{-4}
-10^{-5}
-10^{-6}
-10^{-7}
-10^{-8}
-10^{-9}
$-\Delta x$