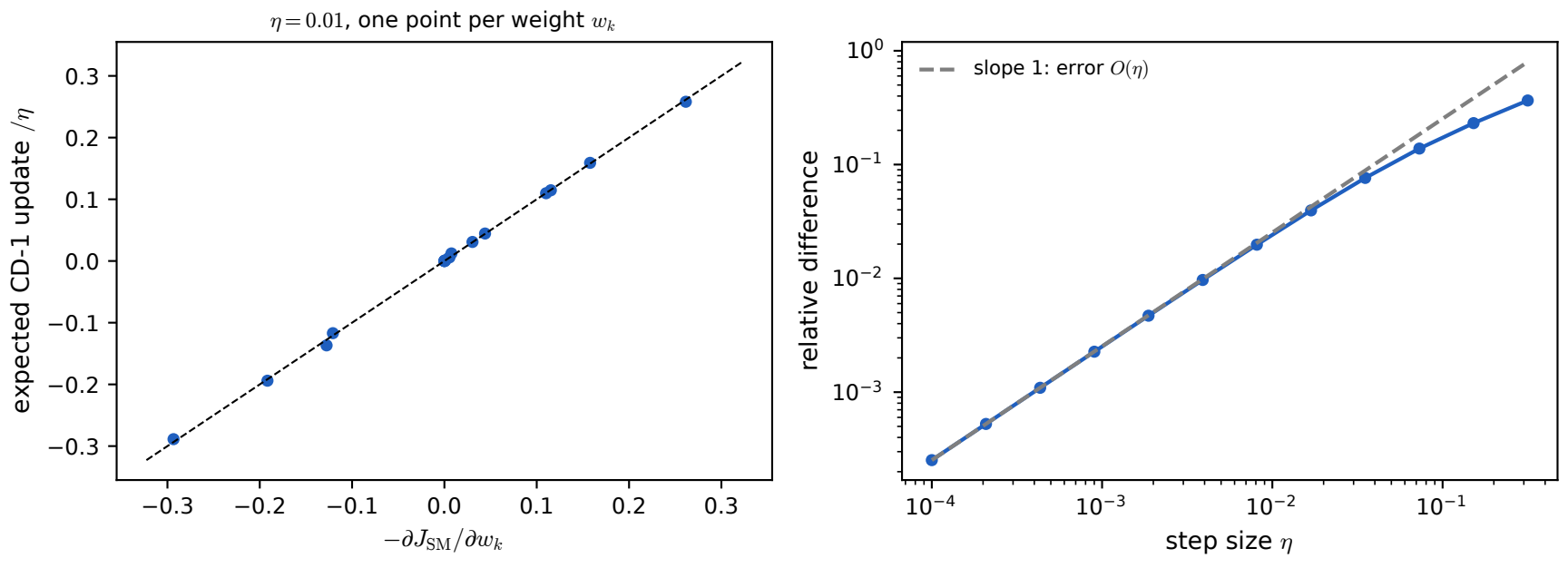

$\eta = 0.01$, one point per weight w_k
expected CD-1 update $/\eta$
$-\partial J_{\mathrm{SM}}/\partial w_k$
0.3
0.2
0.1
0.0
−0.1
−0.2
−0.3
relative difference
step size η
slope 1: error $O(\eta)$
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}