Cumulative distributions **QNGOptimizer** AdamOptimizer approx='block-diag', λ =0.5 β_1 =0.9, β_2 =0.99, ε =10⁻⁸ 1.0 $\eta = 2.25$ $\eta = 0.01$ $\eta = 0.8$ $\eta = 0.01$ $\eta = 0.05$ $\eta = 0.2$ $\eta = 2.75$ $\eta = 1$ Probability of occurrence $\eta = 0.2$ 8.0 $\eta = 1.1$ $\eta = 0.4$ $\eta = 3.25$ $\eta = 0.3$ $\eta = 1.3$ $\eta = 0.75$ $\eta = 3.75$ $\eta = 0.5$ $\eta = 1.4$ $\eta = 1.25$ $\eta = 4.25$ $\eta = 1.75$ $\eta = 0.6$ $\eta = 1.6$ $\eta = 4.75$ 0.6 0.4 0.2 (b) (a) 0.0 MomentumQNGOptimizer MomentumOptimizer ρ =0.9, approx='block-diag', λ =0.5 $\rho = 0.9$ 1.0 n = 0.5 $\eta = 0.01$ $\eta = 0.01$ n = 0.05n = 0.6 $\eta = 0.01$ $\eta = 0.01$ Probability of occurrence $\eta = 0.1$ $\eta = 0.7$ $\eta = 0.01$ $\eta = 0.01$ 0.8 $\eta = 0.2$ $\eta = 0.8$ $\eta = 0.01$ $\eta = 0.01$ $\eta = 0.3$ $\eta = 0.9$ $\eta = 0.01$ $\eta = 0.01$ $\eta = 0.4$ $\eta = 1$ $\eta = 0.01$ $\eta = 0.01$ 0.6 0.4 0.2 (c) (d) 0.0 50 100 150 200 0 50 100 150 0 200 steps steps