Cumulative distributions AdamOptimizer **QNGOptimizer** β_1 =0.9, β_2 =0.99, ε =10⁻⁸ approx='block-diag', λ =0 1.0 stepsize=0.01 stepsize=0.01 stepsize=0.025 stepsize=0.025 Probability of occurrence 0.8 stepsize=0.05 stepsize=0.05 stepsize=0.075 stepsize=0.075 stepsize=0.1 stepsize=0.1 0.6 stepsize=0.125 stepsize=0.125 stepsize=0.15 stepsize=0.15 stepsize=0.175 stepsize=0.175 0.4 stepsize=0.2 stepsize=0.2 stepsize=0.225 stepsize=0.225 stepsize=0.25 stepsize=0.25 0.2 (b) (a) 0.0 MomentumOptimizer MomentumQNGOptimizer ρ =0.9, approx='block-diag', λ =0 $\rho = 0.9$ 1.0 stepsize=0.01 stepsize=0.01 stepsize=0.025 stepsize=0.025 Probability of occurrence 8.0 stepsize=0.05 stepsize=0.05 stepsize=0.075 stepsize=0.075 stepsize=0.1 stepsize=0.1 0.6 stepsize=0.105 stepsize=0.125 stepsize=0.109 stepsize=0.15 stepsize=0.113 stepsize=0.175 0.4 stepsize=0.116 stepsize=0.2 stepsize=0.225 stepsize=0.25 0.2 (c) (d) 0.0 50 100 150 200 0 100 150 0 50 200 steps steps