



Figure S2: Distribution of the time to reach frequency  $x_c = 0.5$  for various values of  $s$  and  $N$ , where  $s$  and  $N$  are constant. Analytical and simulation results are compared. Simulation results are averaged over 5000 runs. A maximum absolute deviation of  $\geq 0.05$  between theory and simulations is found for  $\alpha = Ns \lesssim 10$  (see panel C).