H = complete hypergraph, N = 2500, I0 = 500, nsims = 10beta1 \* N = 3.0, beta2 \*  $N^2 = 3.0$ Gillespie average curve / N Sampled avg Gillespie / N) 1.0 Mean-Field Solution (Eq. 2.18\*) Fitted MF with (beta1 hat = 2.903, beta2 hat = 3.21) 8.0 Proportion of Infected 0.6 0.2 0.0 10 6 Time t