average number of infecteds versus time 500 p1 =0.00 , p2 =0.10, β = 0.3 p1 =0.00 , p2 =0.30, β = 0.3 p1 =0.00 , p2 =0.50, β = 0.3 p1 =0.00 , p2 =0.70, β = 0.3 p1 =0.00 , p2 =0.90, β = 0.3 400 300 -200 100 0 10 20 30 70 50 40 60 time