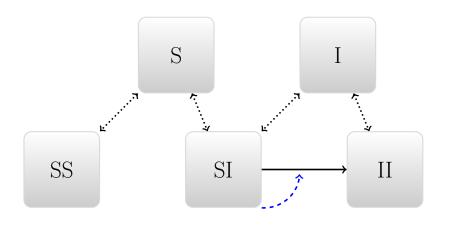
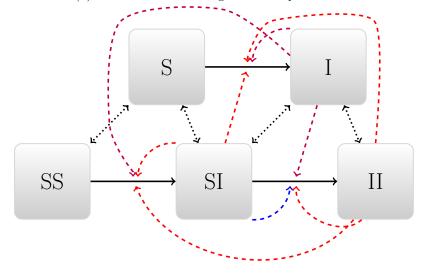


(a) Instantaneous switching without extra-pair contact



(b) Instantaneous switching with extra-pair contact



 ${\rm (c)\ Pair formation\ model\ without\ extra-pair/uncoupled\ contact}$ 

(d) Pairformation model with extra-pair/uncoupled contact