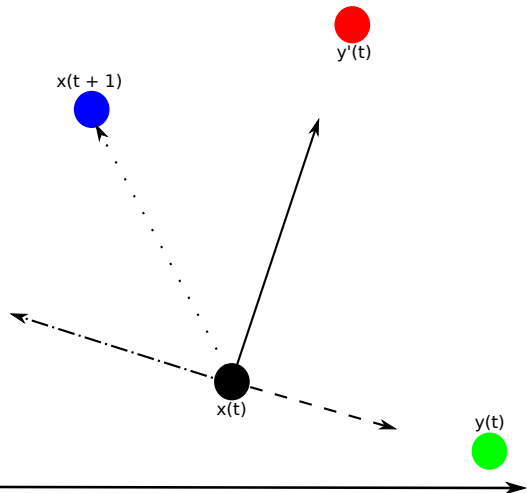
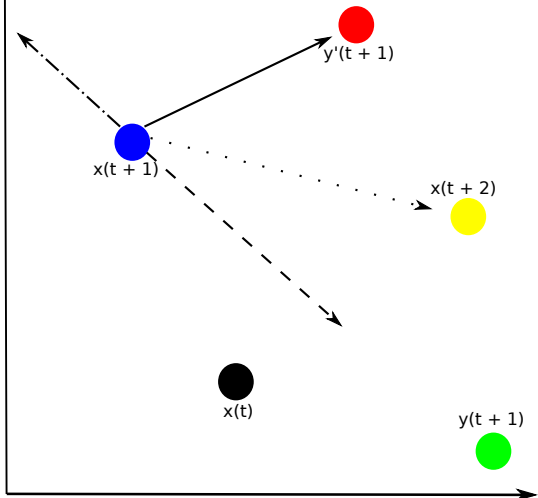


inertia velocity  $\cdots\cdots\cdots\rightarrow$   
social velocity  $\longrightarrow$   
cognitive velocity  $-\cdots-\cdots\rightarrow$   
new velocity  $\cdot\cdot\cdot\cdot\cdot\rightarrow$



(a) Time step  $t$

inertia velocity  $\cdots\cdots\cdots\rightarrow$   
social velocity  $\longrightarrow$   
cognitive velocity  $-\cdots-\cdots\rightarrow$   
new velocity  $\cdot\cdot\cdot\cdot\cdot\rightarrow$



(b) Time step  $t+1$