

**time**

**measurements**  
(observed)

**states**  
(cannot be observed and  
have to be *estimated*)

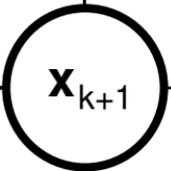
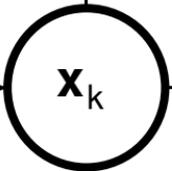
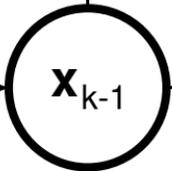
k-1

k

k+1



$\mathbf{p}(\mathbf{z}_k | \mathbf{x}_k)$   
(measurements  
only depend on  
state)



$\mathbf{p}(\mathbf{x}_k | \mathbf{x}_{k-1})$   
(first order Markov process)

