process model

noisy, incomplete observations

 $\boldsymbol{x}_t = \boldsymbol{E}_t \boldsymbol{x}_{t-1} + \boldsymbol{w}_t$ 

 $oldsymbol{w}_t \sim \mathcal{N}(oldsymbol{0}, oldsymbol{Q}_t)$ 

 $oldsymbol{v}_t \sim \mathcal{N}(oldsymbol{0}, oldsymbol{R}_t)$ 

 $oldsymbol{y}_t = oldsymbol{H}_t oldsymbol{x}_t + oldsymbol{v}_t$ 

uncertainty model