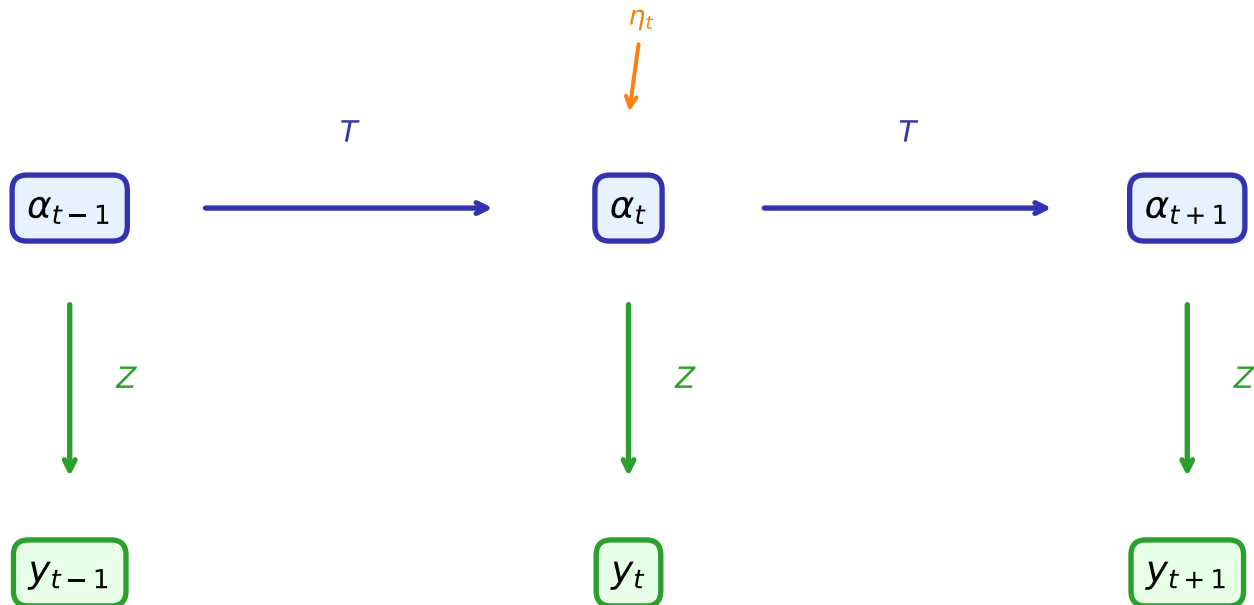


# State-Space Model Framework

Latent State  $\alpha_t$   
Observation  $y_t$



State Equation:  $\alpha_t = T\alpha_{t-1} + R\eta_t$   
Observation Equation:  $y_t = Z\alpha_t + \varepsilon_t$

$\eta_t \sim N(0, Q)$  (state noise)  
 $\varepsilon_t \sim N(0, H)$  (observation noise)