

Objective at time t :

$$\max_{a_{t:t+H-1}} \sum_{h=0}^{H-1} [r_{t+h|t} - \lambda_t \cdot \max(0, f_{t+h|t} - \tau)]$$

Observe
 s_t, f_t
current state

Predict
 $\hat{s}_{t:t+H}, \hat{f}_{t:t+H}$
rollout horizon

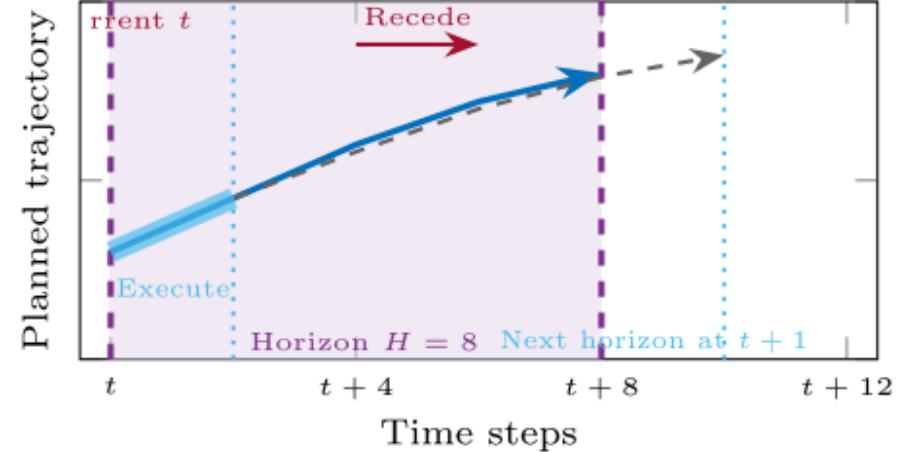
Optimize
 $\max \sum (r - \lambda(f - \tau))$
with constraint

Select
 $a_{t:t+H-1}^*$
action sequence

Execute
 a_t^*
first action only

$t \leftarrow t + 1$, repeat

Receding Horizon Mechanism



Fatigue Constraint in Planning

