

Evaluation of  
Reference  
policy

Define the reference policy  $\Pi$  by **Policy 1**

Evaluate the approximate value function  $\{W^\Pi(\mathcal{S}_t) \mid \forall \mathcal{S}_t\}$   
analytically by **Theorem 1**

Approximate the optimal value function  $\{W(\mathcal{S}_t) \mid \forall \mathcal{S}_t\}$   
with the approximate optimal policy by  $\{W^\Pi(\mathcal{S}_t) \mid \forall \mathcal{S}_t\}$ , then  
perform one-step policy iteration by solving **P2**

Scheduling with  
approximate  
value function

Decouple and decompose **P2**  
into  $\{\mathbf{P2.1}(n, k) \mid \forall k\}$ ,  $\{\mathbf{P2.2}(n, k) \mid \forall k\}$  and  $\mathbf{P2.3}(n)$

Alternatively optimize the abovementioned subproblems  
via  $n$  iterations and derive the proposed policy  $\Psi^{(n)}$