

$$\Phi\omega \approx R + \gamma P^\pi \Phi\omega \quad (1)$$

$$Q^\pi = R + \gamma P^\pi Q^\pi \quad (2)$$

$$Q(s,a) = \omega^T \phi(s,a) \quad (3)$$

$$Q(s,a) = \sum_{i=1}^k \phi_i(s,a) \omega_i \quad (4)$$

$$V^\pi(s) = \sum_a \pi(s,a) \sum_{s'} P_{ss'}^a [R_{ss'}^a + \gamma V^\pi(s')] \quad (5)$$

$$\Phi^T(\Phi - \gamma P^\pi \Phi) \omega^\pi = \Phi^T R \quad (6)$$

$$\delta_t = \min_c \left\| \sum_{j=1}^{|Dic_{t-1}|} c_j \phi(x_j) - \phi(x) \right\|^2 \leq \mu \quad (7)$$

$$c_t = K_{t-1}^{-1} k_{t-1}(x) \quad (8)$$

$$\delta_t = k(x,x) - k_{t-1}^T(x) c_t \quad (9)$$