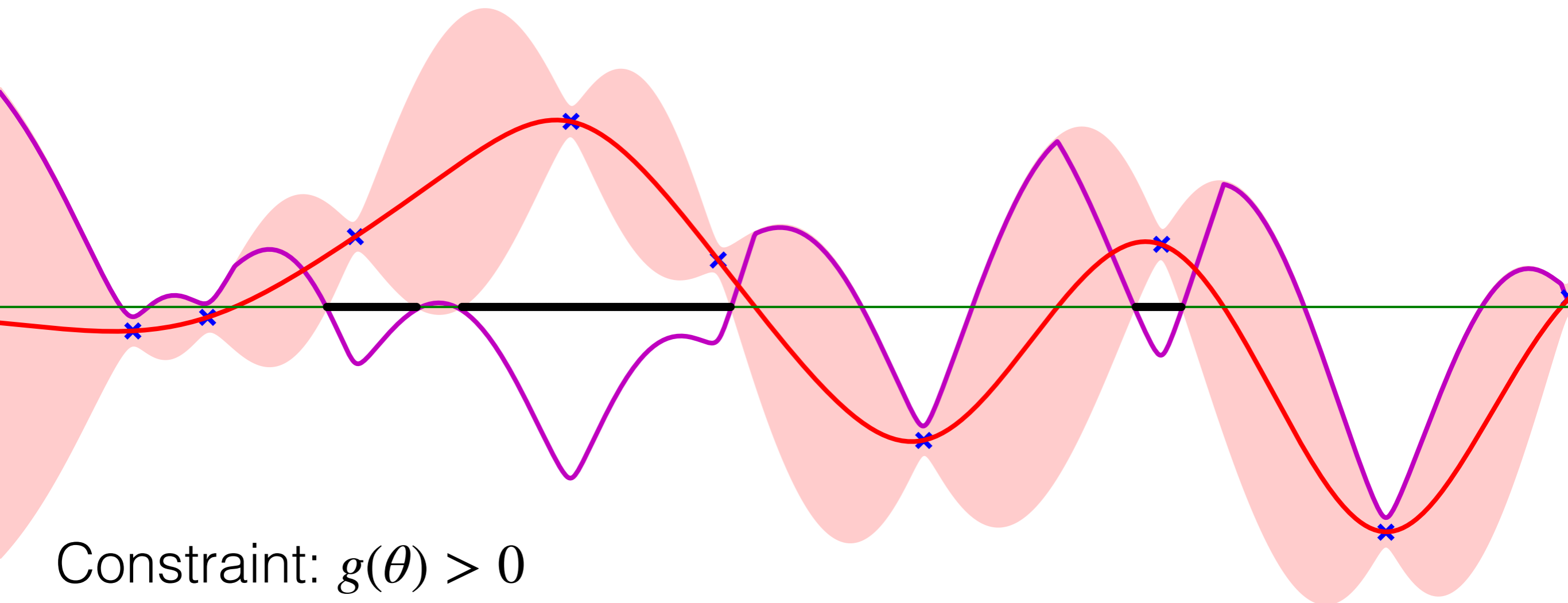


Active learning of constraints

- mean function $\mu(\theta)$
 - confidence interval $\mu(\theta) \pm 2\sigma(\theta)$
 - × observation $(\theta_i, g(\theta_i))$
- #observations = 9

- acquisition function
 $\phi(\theta) = 2\sigma(\theta) - |\mu(\theta)|$

next: test action with parameter
 $\theta^* = \operatorname{argmax} \phi(\theta)$

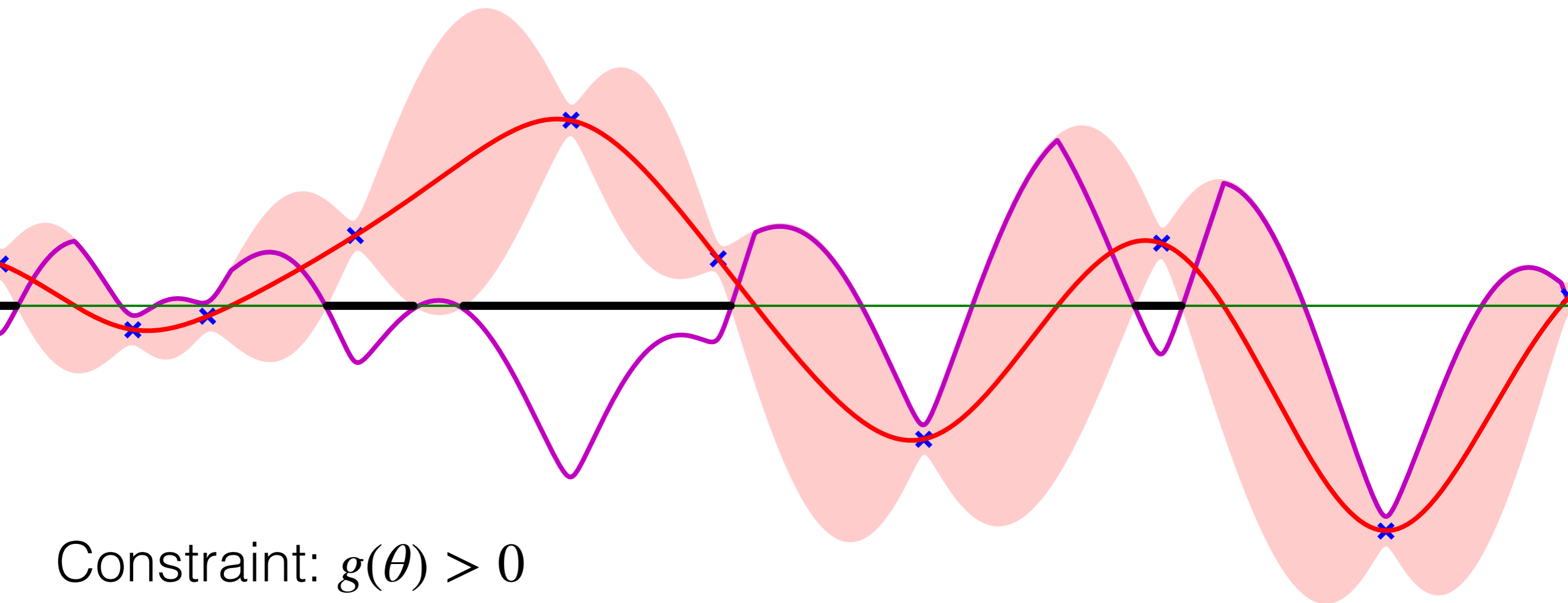


Active learning of constraints

- mean function $\mu(\theta)$
 - confidence interval $\mu(\theta) \pm 2\sigma(\theta)$
 - × observation $(\theta_i, g(\theta_i))$
- #observations = 10

- acquisition function
 $\phi(\theta) = 2\sigma(\theta) - |\mu(\theta)|$

next: test action with parameter
 $\theta^* = \operatorname{argmax} \phi(\theta)$



Constraint: $g(\theta) > 0$