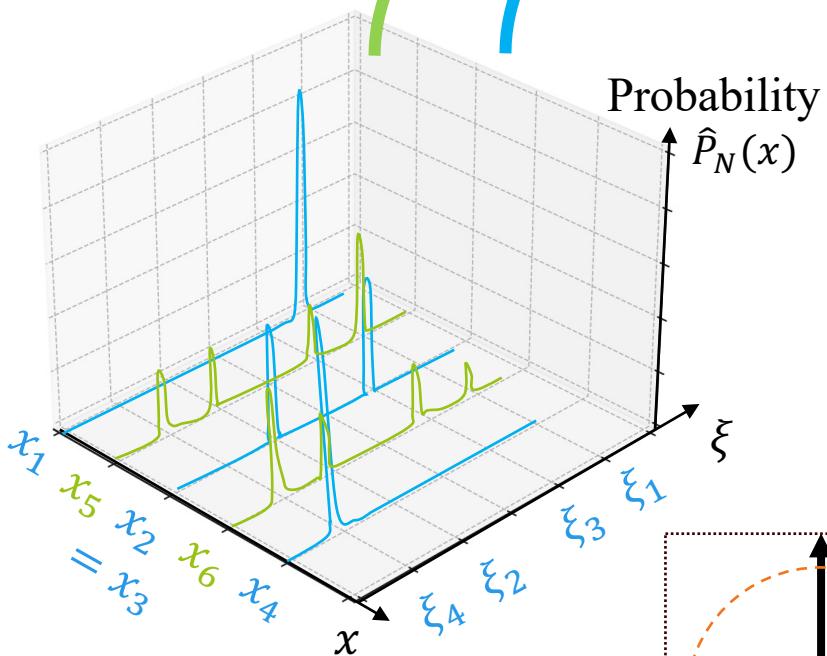


Ambiguity Set $\mathcal{P}(x)$

Theorem 1:
 $\mathbb{P}(Q(x) \in \mathcal{P}(x)) \geq 1 - \beta$

Definition 2:
 Interpolation of Empirical Measures

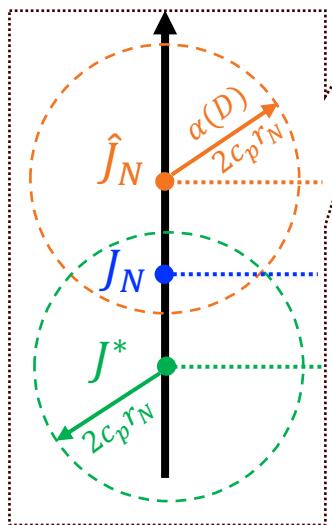
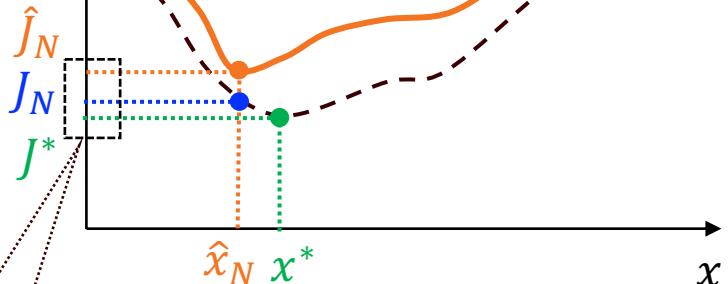


Probability
 $\hat{P}_N(x)$

Objective

Theorem 3:
 Tractable Reformulation

$$\sup_{P \in \mathcal{P}(x)} \mathbb{E}_P (h(x, \xi))$$



Theorem 2:
 Out-of-Sample &
 Optimality Guarantee