

# E ei b ^oVi ^dc #WhZY [gZf j Zci ^hi Xdc YZcXZ ^ciZgkVah [dg[j cXi ^dcVah ^c XdchigV ^cZY ^ckZghZ egdWazb hOHZhdak ^c \ i] Z 8j ggj hXdc\_ZXij gZ

FVj 8ViaZ' FgVi^ FVi^ C ^Z i iVcaZn' >dj b Vc EI ] WY^ C ^VZaAj j hVa/ '9Va[dgc V ^chi ^j iZ d[I ZX] cda^ \ n (J c^kZgh^n d[ 9Va[dgc V" 8Zg ZaZn ) 9VgcZ\ Z C ZaZc J c^kZgh^n

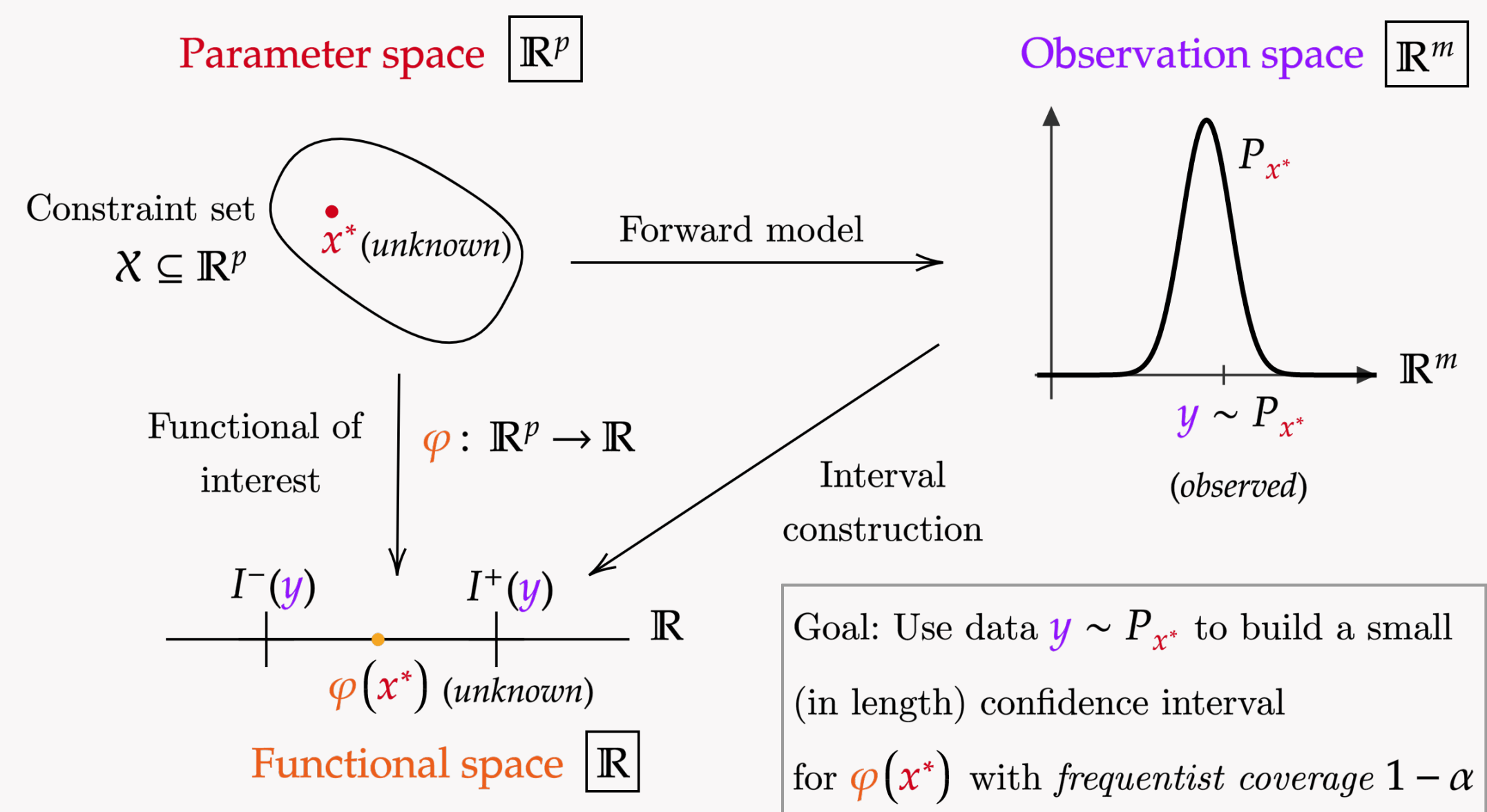
## C di ^kVi ^dc

"~ %N "¥ A>%H >...B> , ~%o £ L ~LLH 7 ~BL ^">s-¥ 1 Y>~ TB> , ~ 71 "p>" %o

- $\tilde{L}^T > AL$  :  $s_p > BL > \hat{y} > -H \hat{y} > \sim \alpha > L \sim \omega$  ,  $N > \% \hat{y} \}$  ... ,  $\sim \% \hat{y} > -H$  ,  $\hat{Y} \dots \hat{Y} \% \hat{y}$
- $\therefore L > B > A > "LH / ^LBS \% \hat{y} > HW \% \hat{y} > A L "$  , "pL HL %dLH LCL , NB, CL ^>nL

"Ns Y~HL^B CL ^%£ L s-BY^ Y~LBL %o ¥ ^S%o Ns , CL^B CL ^%£ L s-BY^ LB ~, } SB %o

## ?ckZghZ egdWazb h hZij e



## = dVa

† s-H>~ s-"L^C> >%o> >%o. %£A L £ s\_p T-"S L %o } ..L nY>^>~"LL%o" B ~">s-%o (x) £ s\_p ... , A>Ass ¥ 1 -

$$\inf_{X \times X} P_y P_x (x) [I^-(y), I^+(y)] = 1 -$$

3^ , ~nL^ ~, ~, Ns-"L^C> %o p>~ , >¥L %o ~ B^LH A L s-"L^C> %o ~H, ~ ¥ >%o } L %o y L s\_p , H>~HB, ~%o>s-"%o

## FgZk^dj hVeegdVX]

· nL~L^> } L^p, H", AÝSHs-"L^C> %£ s\_p B, ^LB" B, CL ^>nL s%o pL %o Y ">~L, Y%o. ....^, >Bp 3">y

† s-H>1 - B, ~THL~BL %o C(y) N^ x

"~"L^%oB" s £ s\_p "pL B, ~%o>s-" %o X

) >...p^, Ynp (x)

"", CL^B, CL ^%o %o BL C(y) H, L%o, " ~LLH", AL 1 - N^ "pL s-"L^C> ", AL 1 -

## B^cZVg=Vj hh^Vc b dYZal ^] a^cZVgXdchigV^ci h

$y = Kx + \epsilon$  ,  $X = \{x : Ax \leq b\}$

$\epsilon \sim P_y \in \mathbb{R}^m$   $x \in \mathbb{R}^p$   $N(0, I_m)$   $\sim H(x) = h^T x$

- $\tilde{Z} L \sim L^> \neq s \dots$  , %dH "pL B, ~%o>s-" > , £ %T~sL L~n"p s-"L^C> %o
- $3^ \tilde{Y} H L H s \tilde{Y} \sim N H s n n > \} > \hat{y} > \sim H \sim L \tilde{Y} "$  , ~ %dL B ^>
- ) , %o %o \tilde{Y} H L H B, ~%o>s-LHs-NL^L~BL ... , A L }

## 8j ggj hXdc\_ZXij gZ t' / , +Z

~ , ~%oL^ "pL } , HL  $y = Kx + \epsilon$  ,  $(x) = h^T x$  ,  $\epsilon \sim N(0, I_m)$

·  $\hat{c} > sH 1 - s-"L^C> N^ (x) p > \% b \alpha^L \} L \% ast L \sim A \neq$

$$\min_x / \max_x h^T x$$

$$\% y - Kx \frac{2}{Ax \leq b} \frac{2}{2}$$

:  $s_p \frac{2}{2} \} \hat{Y} Bp \% o > L^ "p > \sim "pL \% \hat{Y} "> \sim L, \hat{Y} \% o. \dots \hat{y}, > Bp$

## 9dcigWj i ^dch

- \* L£ , ... } s > , ~ A>%H >...^, >Bp " , , A">s-1 - B, ~THL~BL s-"L^C> %£ s\_p N L ^Y L ~ %o n Y ^>~"LL %o
- ~ , } L %£ s\_p >~ > n, ^s\_p } "p>" AL >"%o . L C s Y %o >...^, >Bp L %o " , ¥ >~H^L > ... , A L } %o
- 5pL, ^L } 5pL , Y^Y %B, ~WB^Y^L s/N %o

## Dj b ZgXVaZmVb eaZ

, Y^ } L^p, HT dL %o pL , Y^Y %B, ~WB^Y^L s-"L^C> %£ pL ~ "pL ¥ Y~HL^B, CL^

$x, y \in \mathbb{R}^3, y = x + \epsilon, x \sim N(0, I)$  ,  $(x) = x_1 + x_2 - x_3, N(0, I)$

