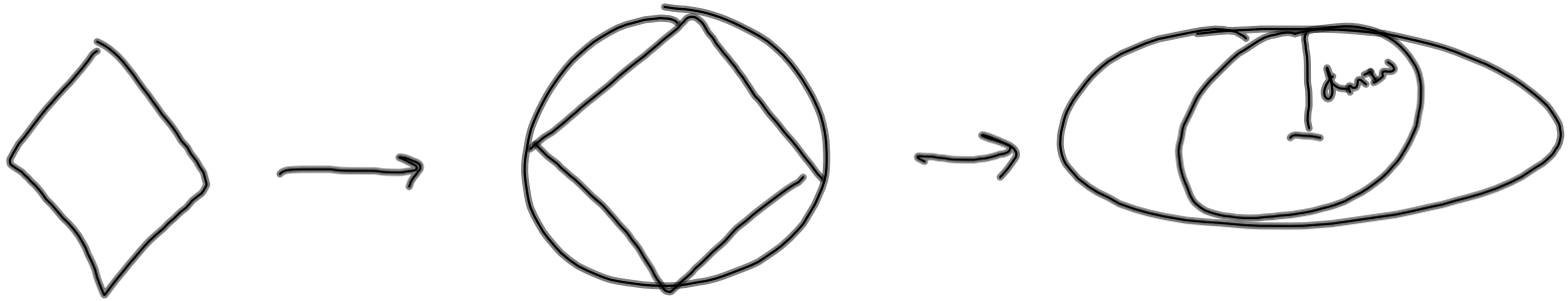


$(X^T X)^{-1} X^T y$

$Var(y) = \sigma^2$

$\rightarrow \hat{\sigma}^2$

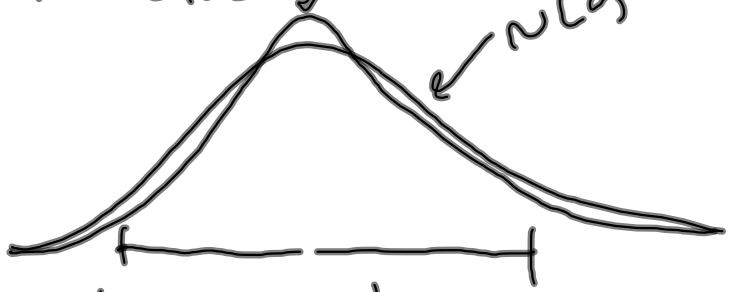
$\omega \in \Omega \qquad (\Omega, \mathcal{A}, \mathbb{P})$

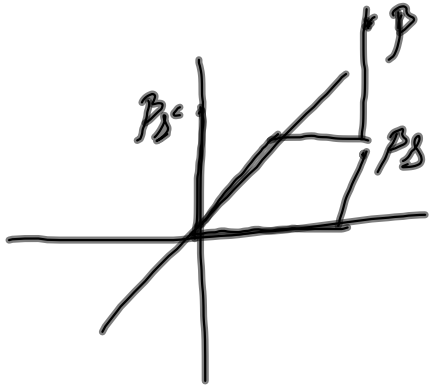
$$T = \left\{ \omega : 2 \| \varepsilon^T X / n \|_\infty \leq \lambda_0 \right\}$$

$\varepsilon(\omega)$

$\|\beta\|_1 = \|\beta_S\|_1 + \|\beta_{S^c}\|_1$

SUB-GAUSSIAN 2





$\|x - y\| \geq |\|x\| - \|y\||$