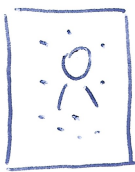


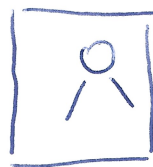
X

b_x



Y

b_y



X'

$b_{x'}$



Y'

$b_{y'}$

$$H^d(b_x, b_y) \ll H^d(b_{x'}, b_{y'})$$

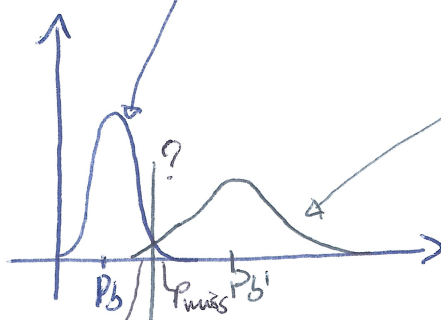
$$P_b \ll P_{b'}$$

$$Pr[H^d(b_x, b_y) \leq \gamma L] \rightarrow 1$$

$$Pr[H^d(b_{x'}, b_{y'}) \leq \gamma L] \rightarrow 0$$

$$H^d(b_x, b_y) \sim \beta(L, P_b)$$

$$H^d(b_{x'}, b_{y'}) \sim \beta(L, P_{b'})$$



P_{fa} \hookrightarrow threshold of acceptance

$\Rightarrow P_{miss}, P_{fa}$ known!

$$P_m = \int_{-\infty}^{\gamma} f(p|H_1) dp$$

$$P_{fa} = \int_{\gamma}^{+\infty} f(p|H_0) dp$$