

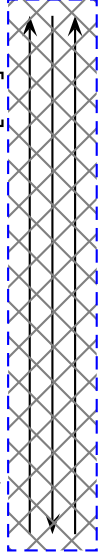
$x$

$\text{Ver}_x(\alpha, \beta, \gamma)$

$\text{ZK-POK}_x[(x, w) \in R]$

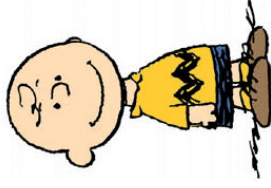
$\xrightarrow{\alpha}$

$\beta = \text{COIN-FLIP}[\mathcal{B}]$



$\xrightarrow{\gamma}$

$x, w$



$\alpha \leftarrow \mathcal{P}_w$

$\gamma \leftarrow \mathcal{P}_w(\alpha, \beta)$