Given two runs with a coinciding prefix α

$$\alpha = g^{k}$$

$$\gamma = k + \beta x$$

$$\gamma' = k + \beta' x$$
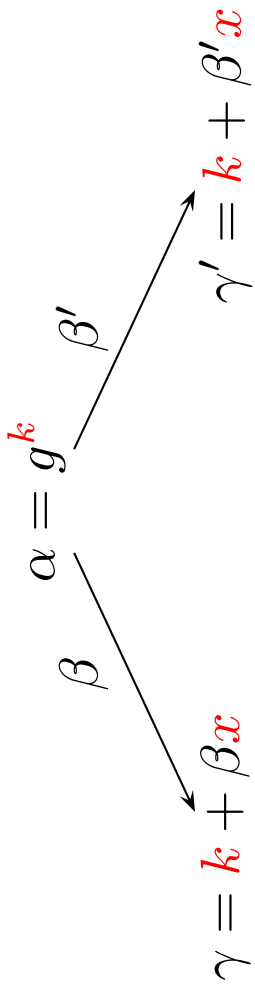
We can extract the secret key $x = \frac{\gamma - \gamma'}{\beta - \beta'}$.