

Public parameters:  $(p, g)$

*Alice*

*Bob*

$$a \xleftarrow{\$} \mathbb{Z}_{p-1}$$
$$\alpha \leftarrow g^a \bmod p$$

$$\xrightarrow{\alpha}$$

$$b \xleftarrow{\$} \mathbb{Z}_{p-1}$$
$$\beta \leftarrow g^b \bmod p$$

$$\xleftarrow{\beta}$$

$$k \leftarrow \beta^a \bmod p$$

$$k \leftarrow \alpha^b \bmod p$$