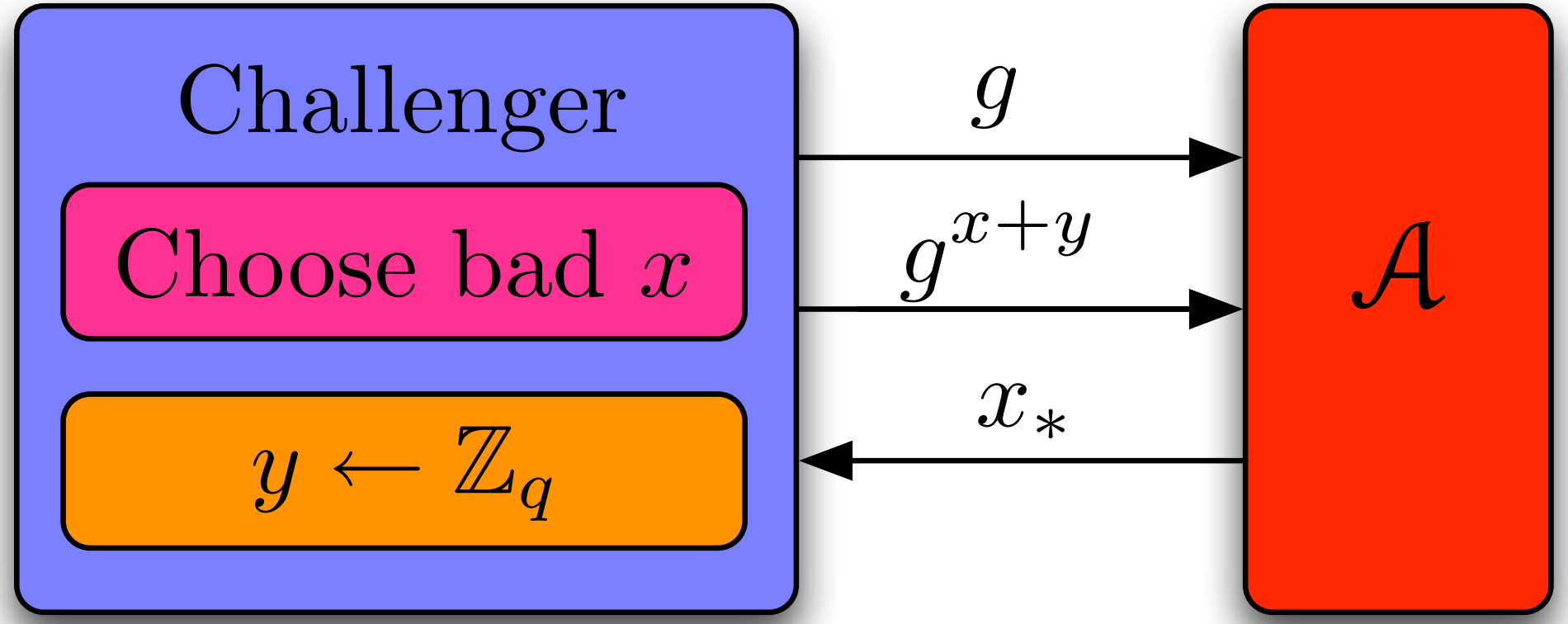
Challenger
Choose bad $x$
$y \leftarrow \mathbb{Z}_q$
$g$
$g^{x+y}$
$x_*$
$\mathcal{A}$