

The Naxos protocol

IK_A A's long-term priv. key
g^{IK_A} A's long-term pub. key
esk_A A's eph. priv. key

I

Fresh esk_I

$ex_I = h1(esk_I, lk_I)$

$hk_I = g^{ex_I}$

$\xrightarrow{hk_I}$

receive X

Fresh esk_R

$ex_R = h1(esk_R, lk_R)$

receive Y

$\xleftarrow{hk_R}$

$hk_R = g^{ex_R}$

$key = h2(g^{(ex_R)}(lk_I), g^{(ex_I)}(lk_R), g^{(ex_I)}(ex_R), I, R)$