

Idemix verification equation

$$\tilde{A}^e = \frac{Z}{S^{\tilde{v}} R_0^{a_0} R_1^{a_1} \cdots R_i^{a_i}} \bmod n$$

public key: $(Z, S, R_0 \cdots R_i, n)$

private key: primes p, q for $n = pq$

issued signature: (A, e, v)

disclosed signature: $(\tilde{A}, e, \tilde{v})$

a_0 as holder secret

$a_1 \cdots a_i$ as attributes

$\tilde{A}, S^{\tilde{v}}$ for unlinkability

$\tilde{A} = AS^r \bmod n$ and

$\tilde{v} = v - er$

Diploma

secret: xxxxxxxx,

name: xxxxxxxx,

title: PhD



A, e, v

Schnorr's Zero Knowledge protocol

given $H = R^a$

choose random t

$$U = R^t \bmod n \xrightarrow{U}$$

$$\xleftarrow{c}$$

choose random c

$$r = t + ca \xrightarrow{r}$$

$$R^r H^{-c} \stackrel{?}{=} U \bmod n$$

commitment

challenge

response