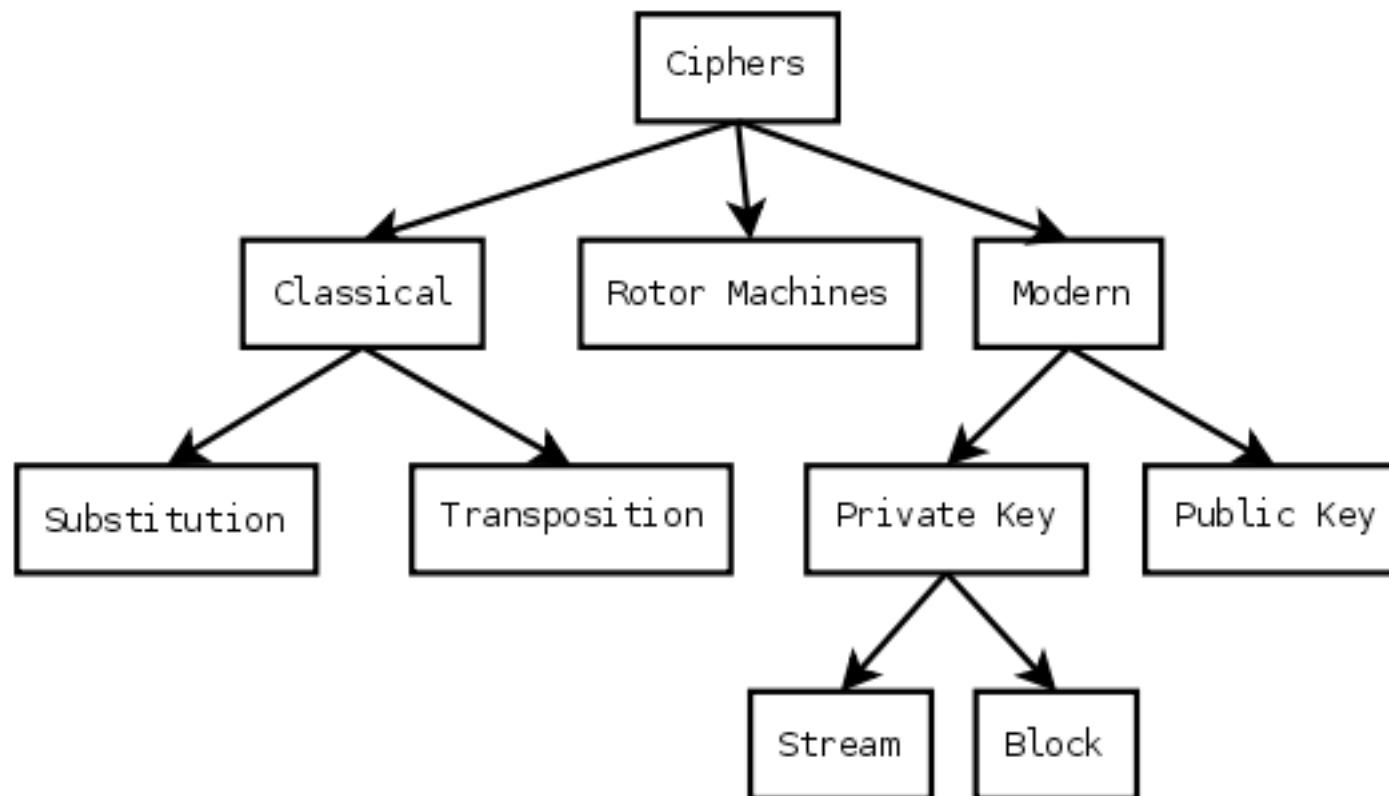


## Lecture 38: crypto



order  $N =$  large prime  
generator  $g =$  large prime

Alice

$$A = g^a \pmod{N}$$
$$B^a = g^{ab} \pmod{N}$$

publish  $A$  on her website

Bob

$$B = g^b \pmod{N}$$
$$A^b = g^{ab} \pmod{N}$$

$$C = m^*(g^{ab}) \pmod{N}, B$$

ElGamal cipher

Rivest, Shamir, Adleman (RSA)