

 taproot 

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- schnorr signatures
- MAST (merkelized abstract syntax tree)
- taproot

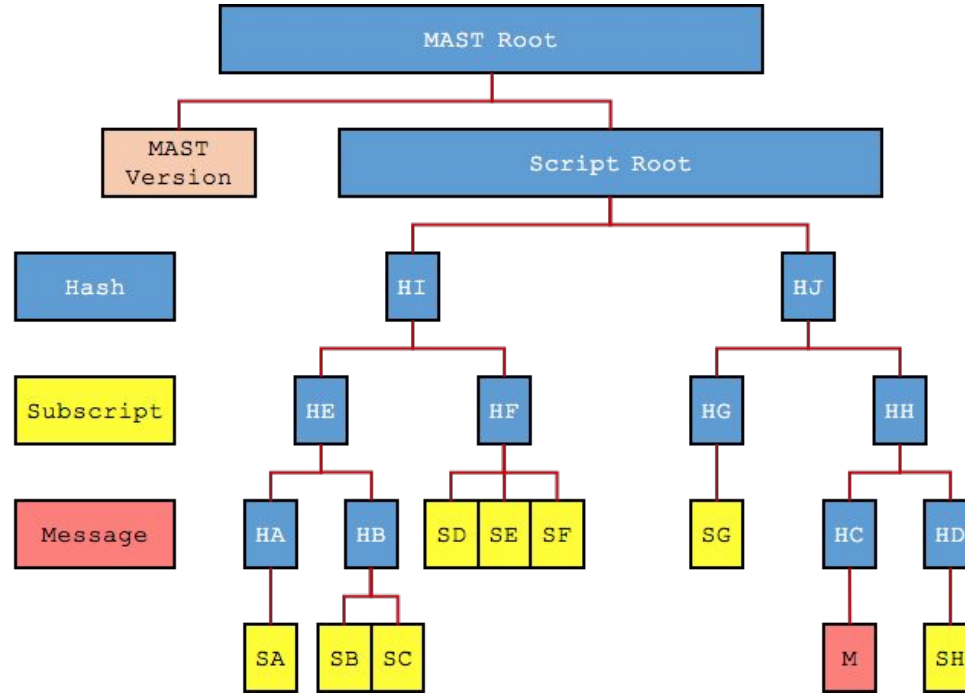
# schnorr signatures

$$\text{privA} + \text{privB} = \text{privC}$$

$$\text{pubA} + \text{pubB} = \text{pubC}$$

$$\text{pubC} + m = \text{pubD}$$

# MAST (merkelized abstract syntax tree)



# taproot

$$C + \text{hash}(C||m)G = P$$

$$A + B + \text{hash}(C||m)G = P$$

$$a + b + \text{hash}(C||m) = p$$

spend by providing sig for P

m = "<timeout> OP\_CSV OP\_DROP B OP\_CHECKSIGVERIFY"

spend by revealing C, m and providing witness that evaluates m to true

Providing signature does not reveal that a script existed.

m is a MAST root. You only provide executing subscript and needed hashes