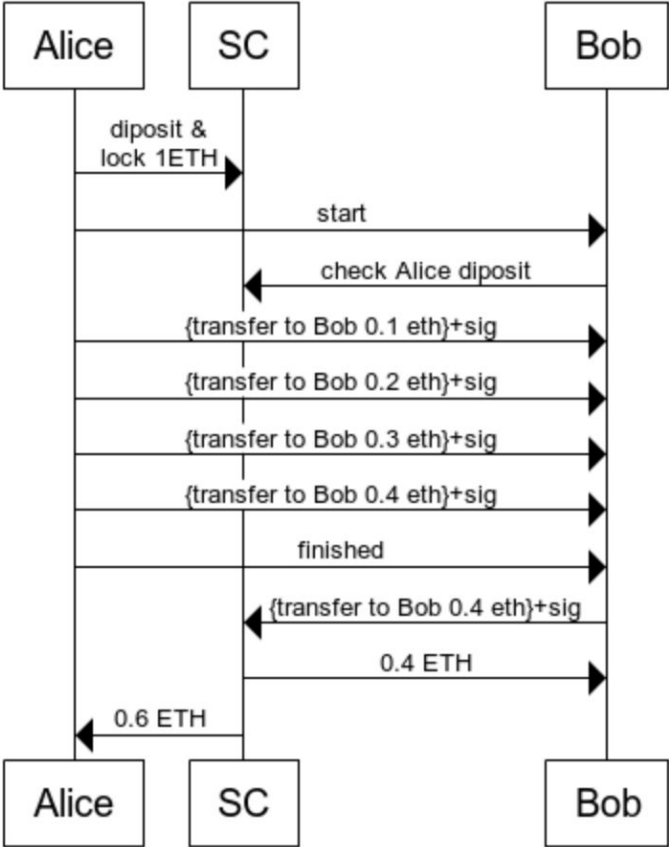


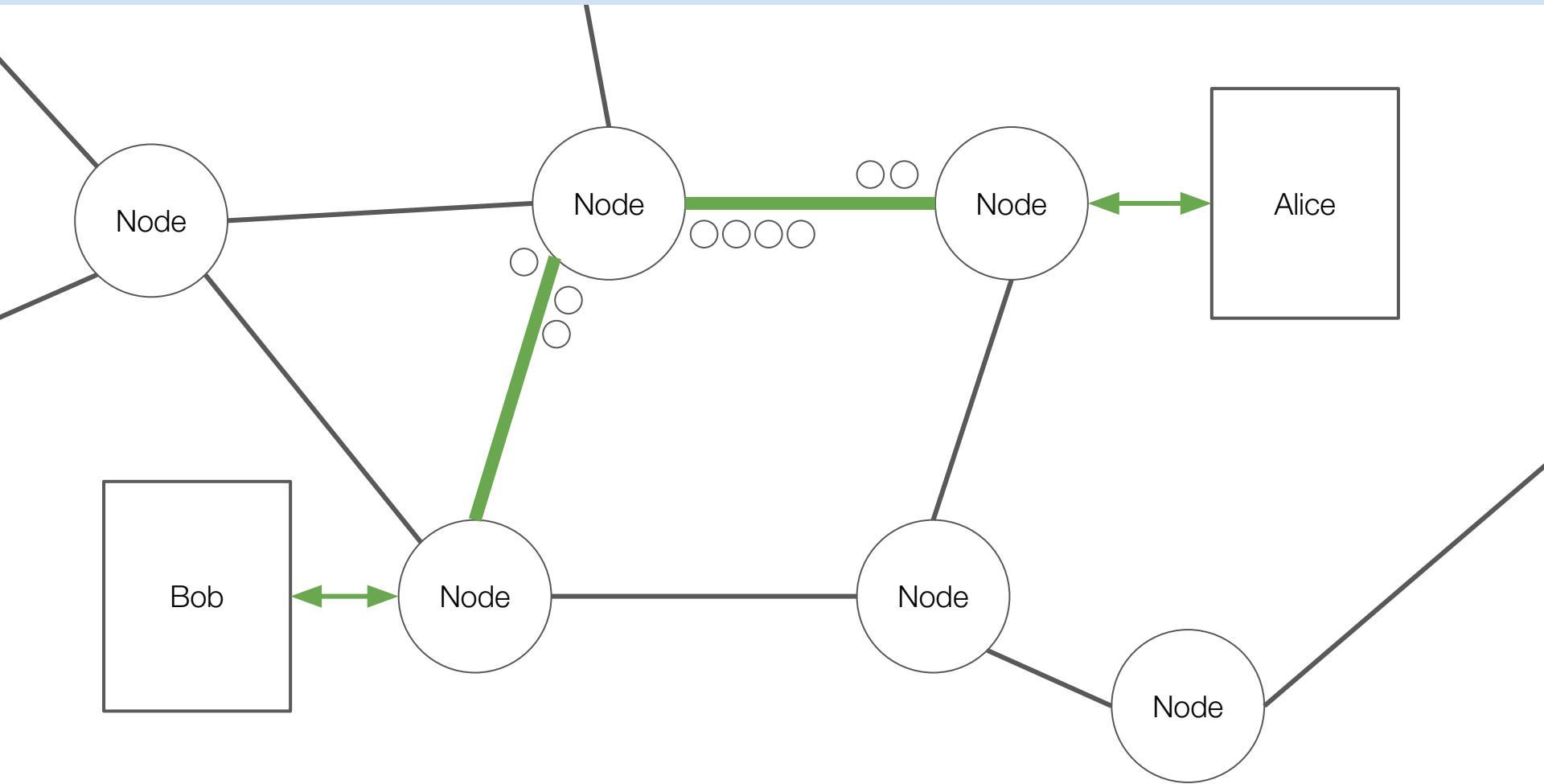
# scaling stuff

@codecontext

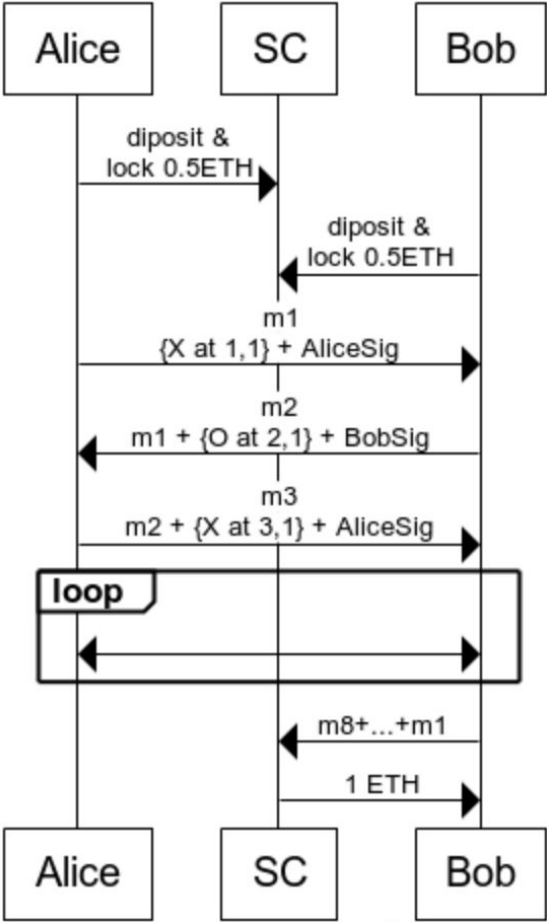
# SIMPLE ONE-TO-ONE PAYMENT CHANNEL

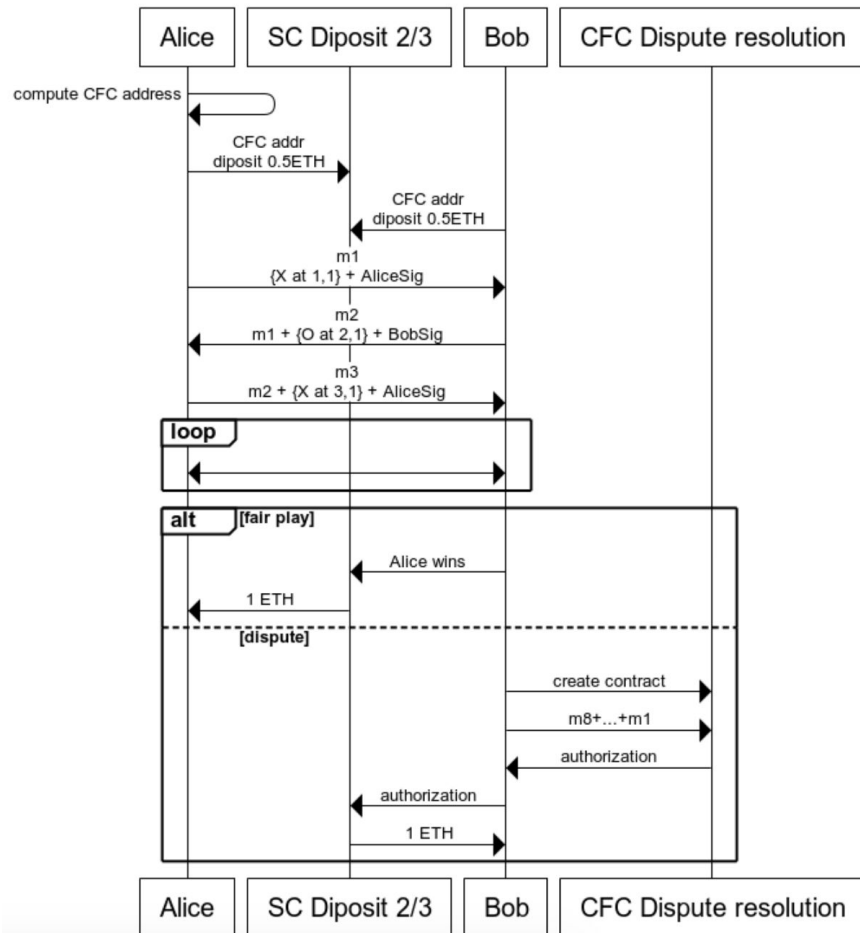


PAYMENT CHANNEL NETWORK



SIMPLE STATE CHANNEL





## counterfactual

/ˌkaʊntəˈfæktʃʊəl/

PHILOSOPHY

*adjective*

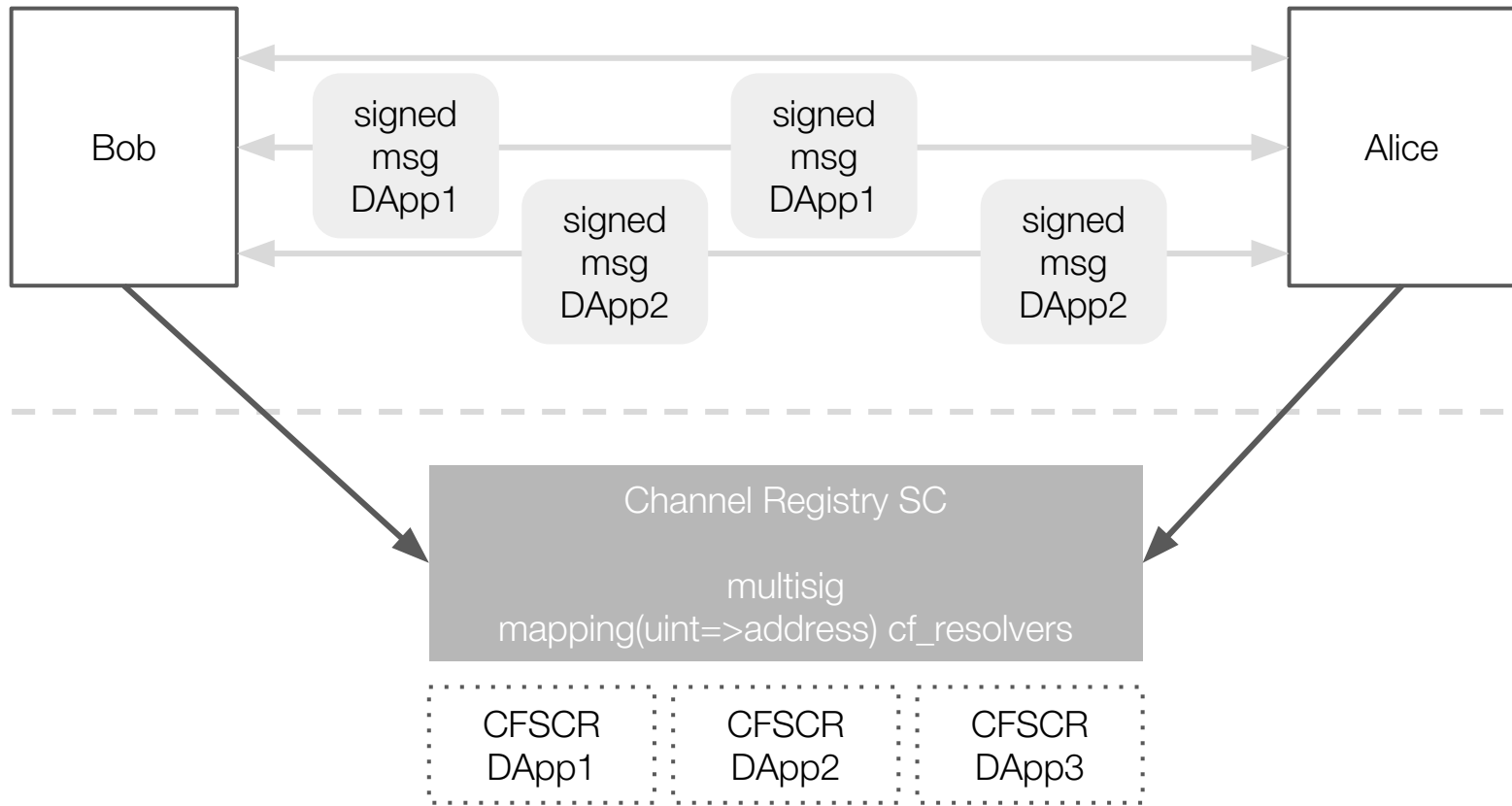
1. relating to or expressing what has not happened or is not the case.

## CREATE2

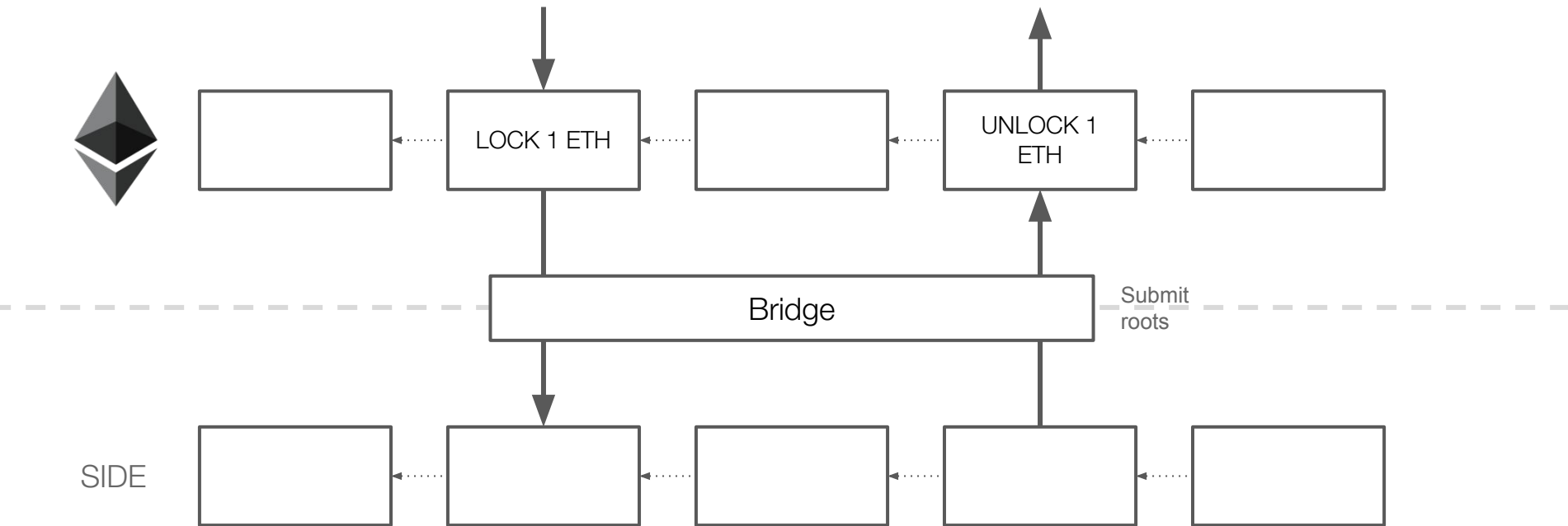
Adds a new opcode at 0xf5, which takes 4 stack arguments: endowment, memory\_start, memory\_length, salt. Behaves identically to CREATE, except using `sha3( msg.sender ++ salt ++ init_code)[12:]` instead of the usual sender-and-nonce-hash as the address where the contract is initialized at.

<https://counterfactual.com/statechannels/>

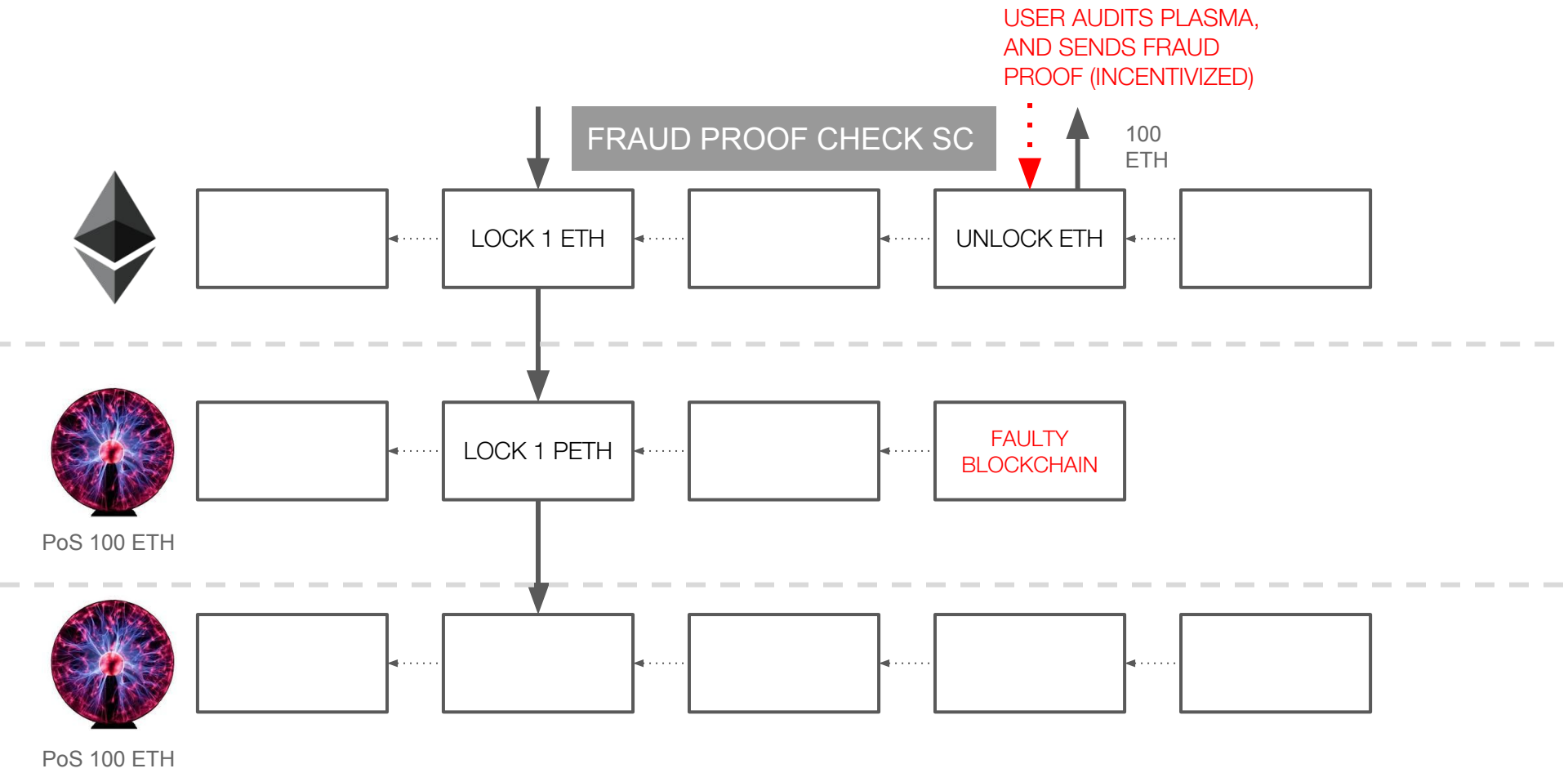
## GENERALIZED STATE CHANNELS



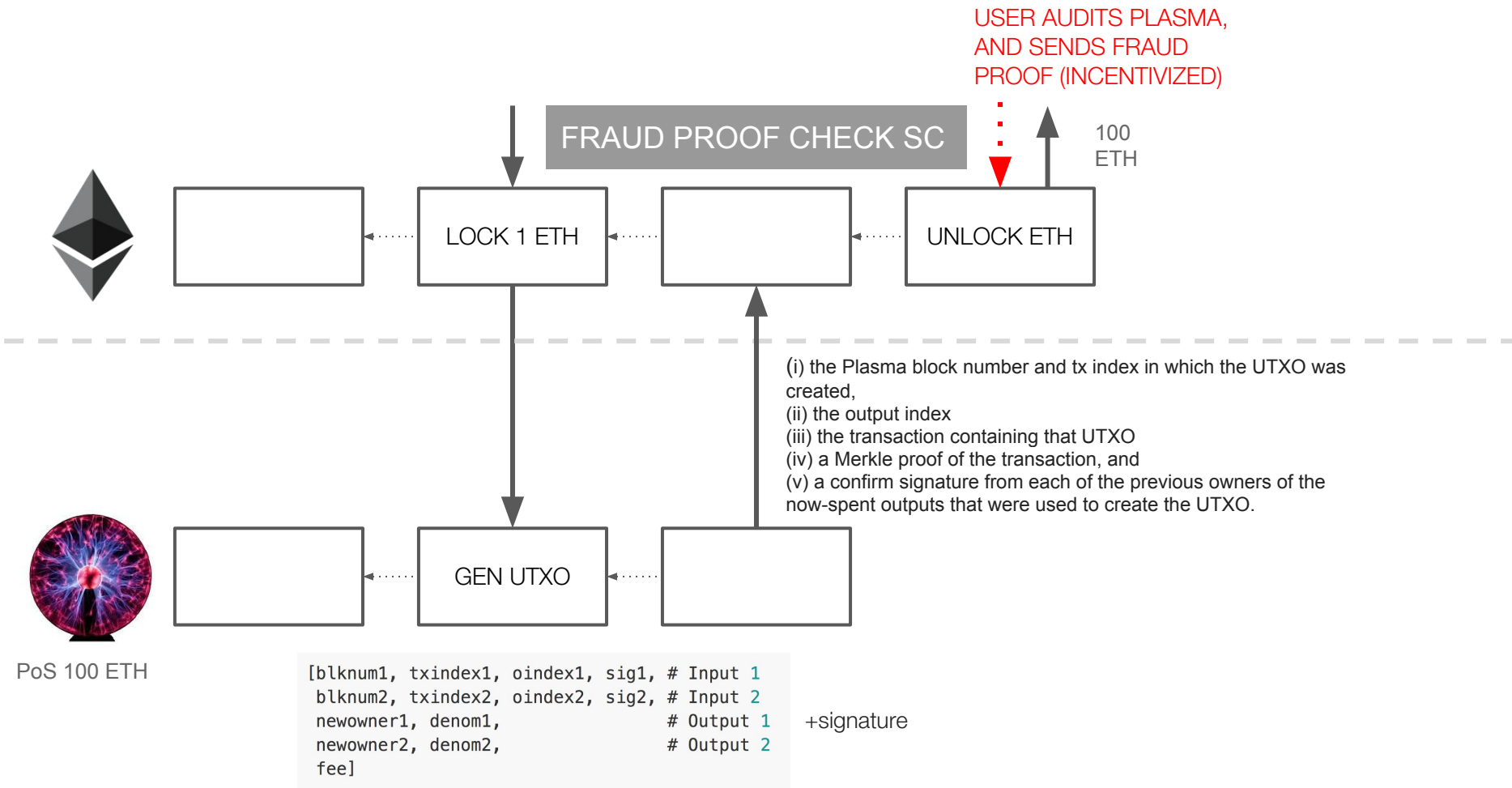
# SIMPLE SIDE CHAINS WITH BRIDGES



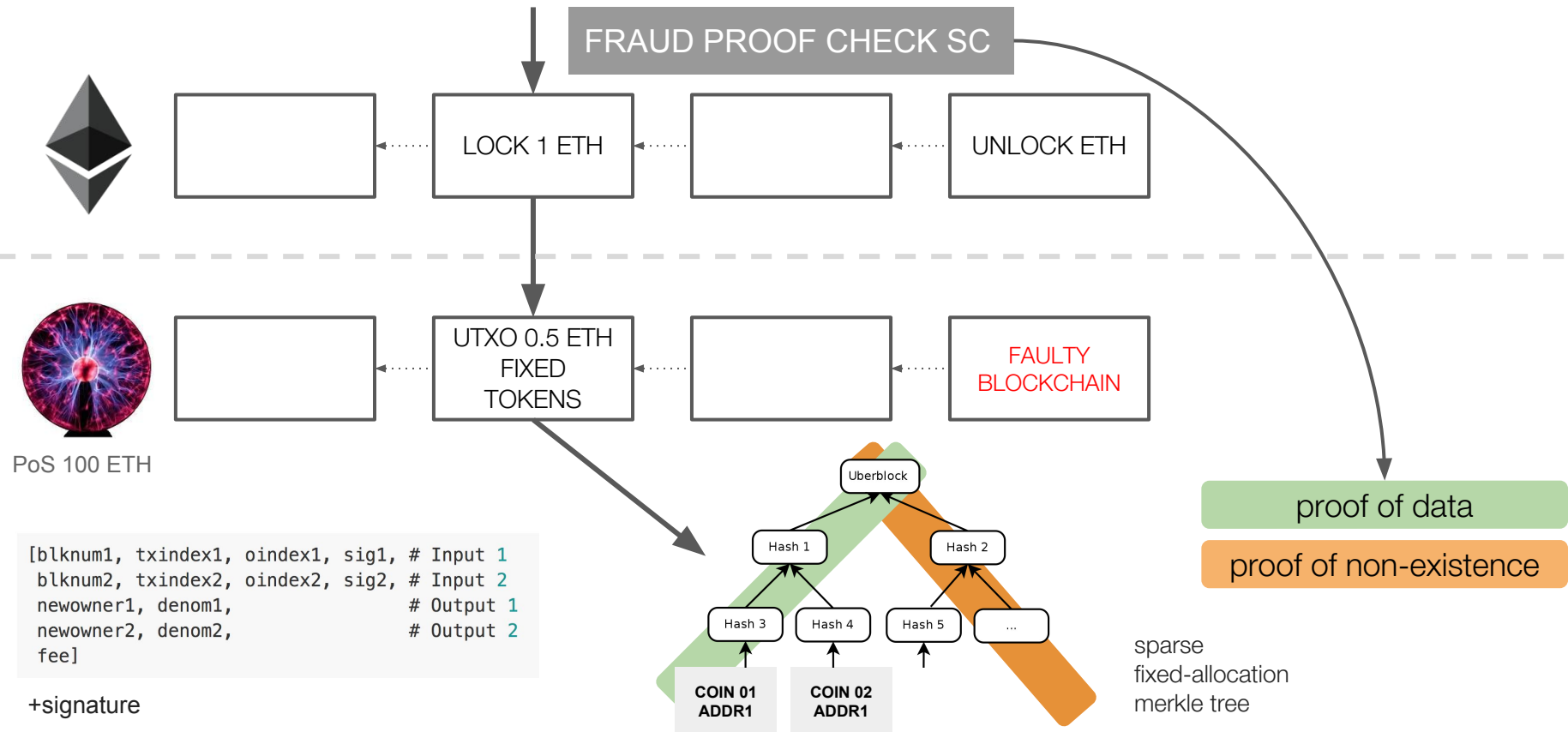
# PLASMA CHAINS



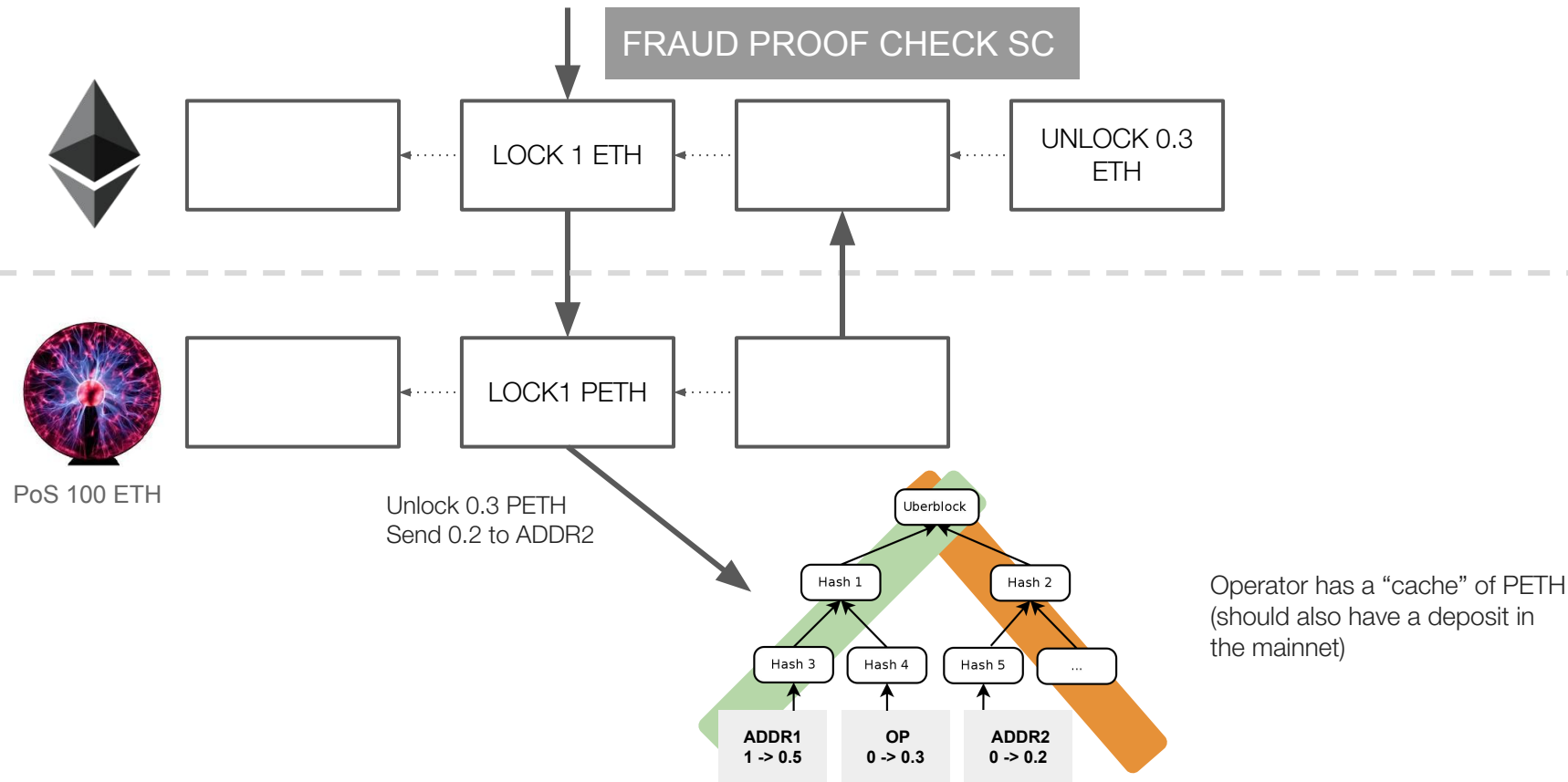


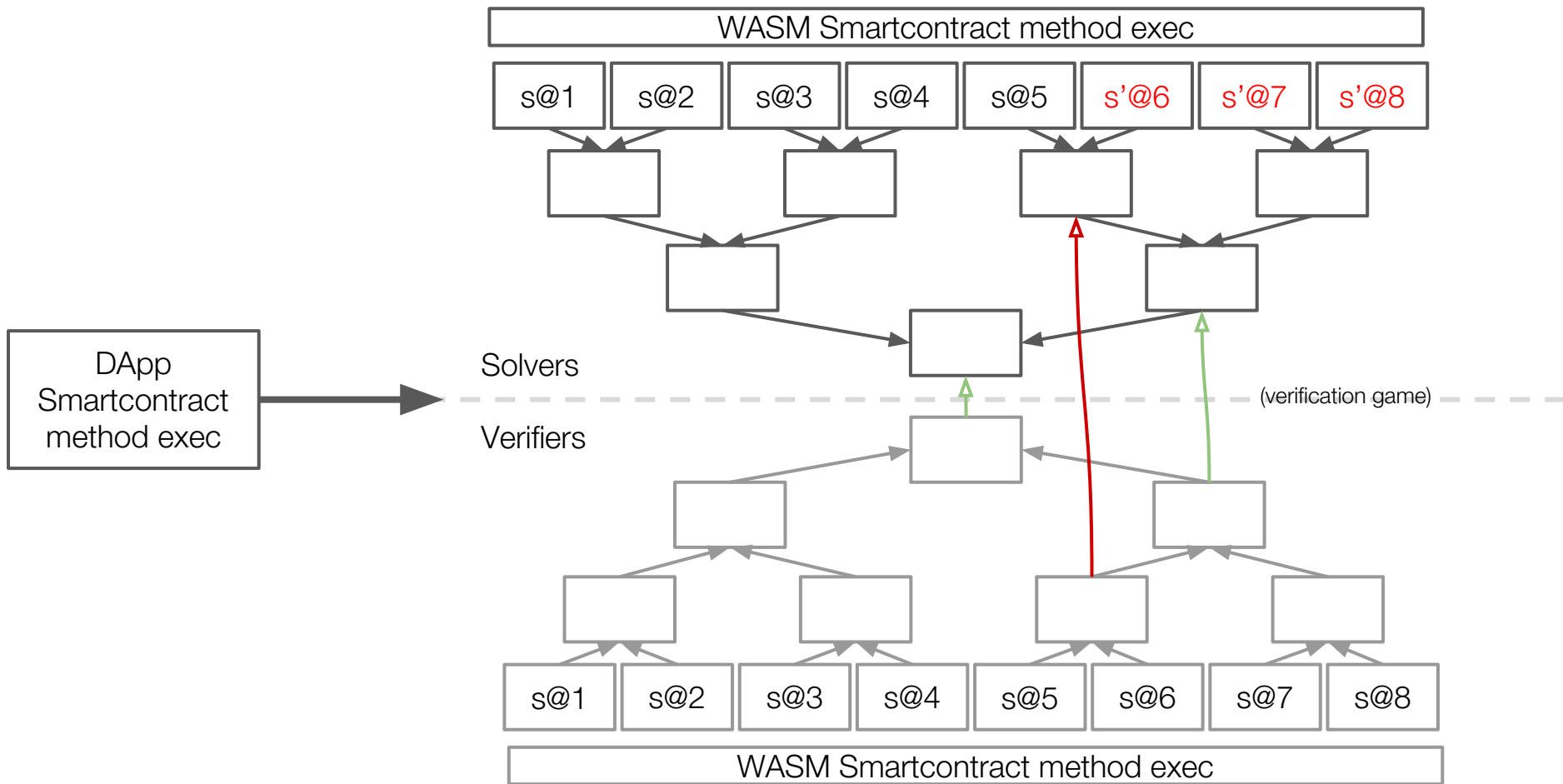


# PLASMA CASH



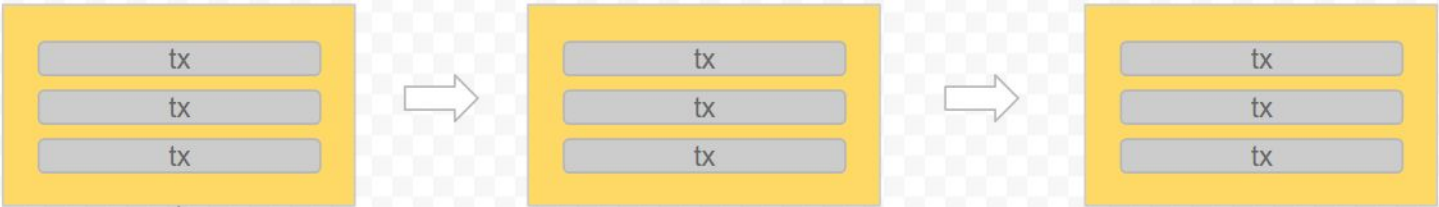
PLASMA DEBIT (plasma cash payment channels)



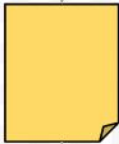


# SHASPER (sharding+casper)

Current Blockchain  
(proof-of-work)

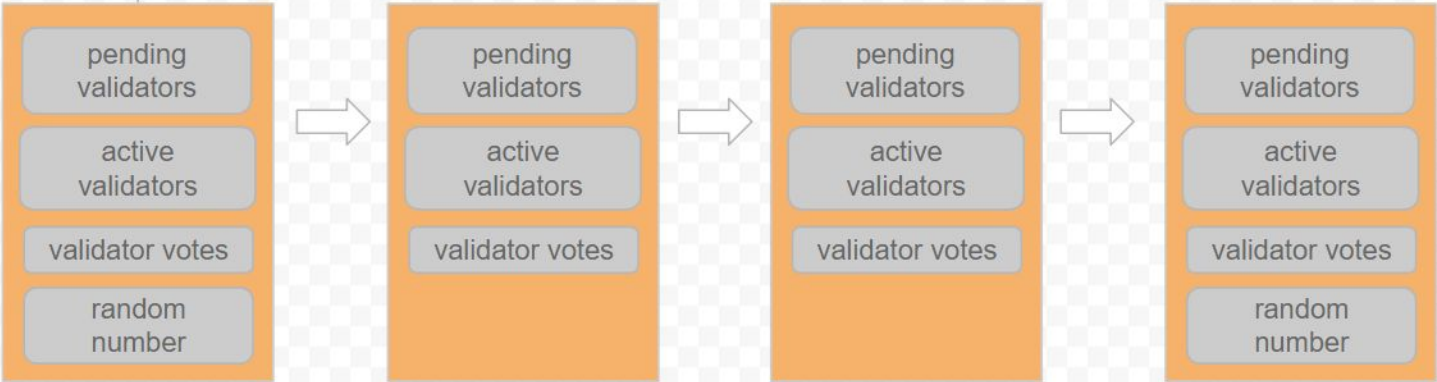


32 eth deposit



pending validator

Beacon Chain  
(proof-of-stake)



# SHASPER (sharding+casper)

