

Postmodern Staking: Delegation, Rehypothecation, & Liquefaction



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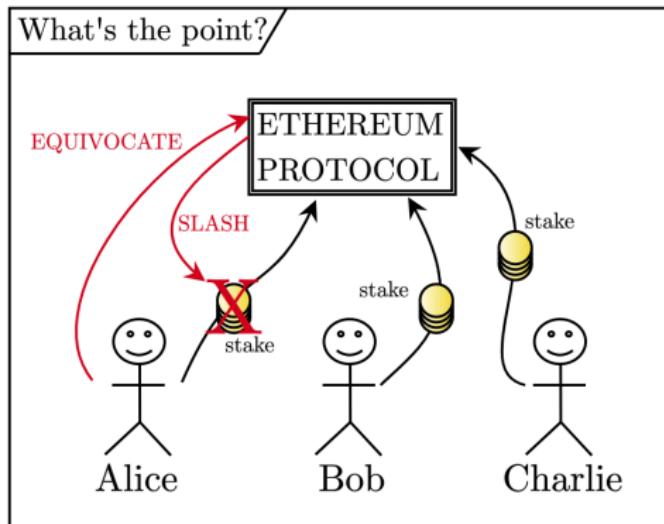
Outline

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 - ◊ Why restake?
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- Restaking
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 - ◊ Slashing
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 - ◊ Liquid Staking Tokens
 - ◊ Liquid Restaking Tokens



Staking

Why stake?

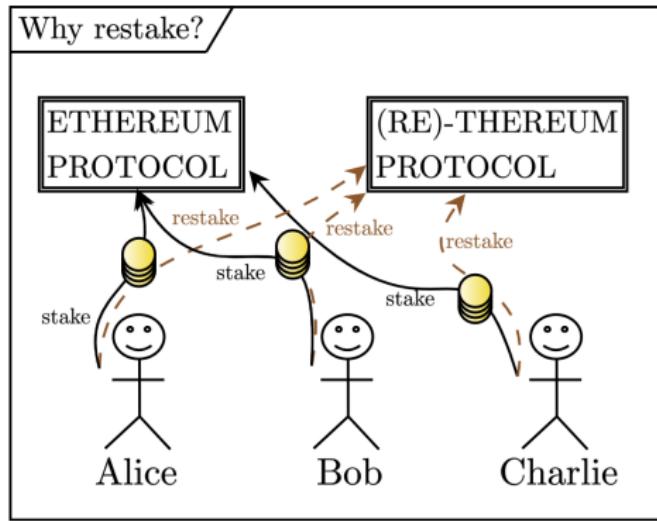


- **Sybil-resistance** – costly to create multiple identities.
- **Accountability** – ability to punish for misbehavior.¹

¹ *The Economic Limits of Permissionless Consensus* – Budish, Lewis-Pye, Roughgarden

Staking

Why restake?

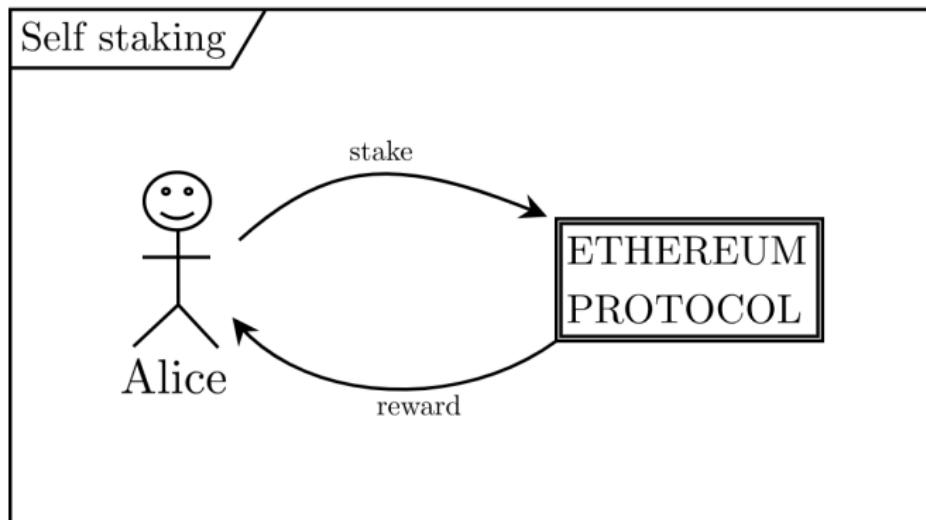


- Creates a “market for decentralized trust.”²
- *Underlying assumption:* Staked assets are under-utilized.
- Only works if stake is **shared** among protocols.

² EigenLayer: The Restaking Collective

Staking

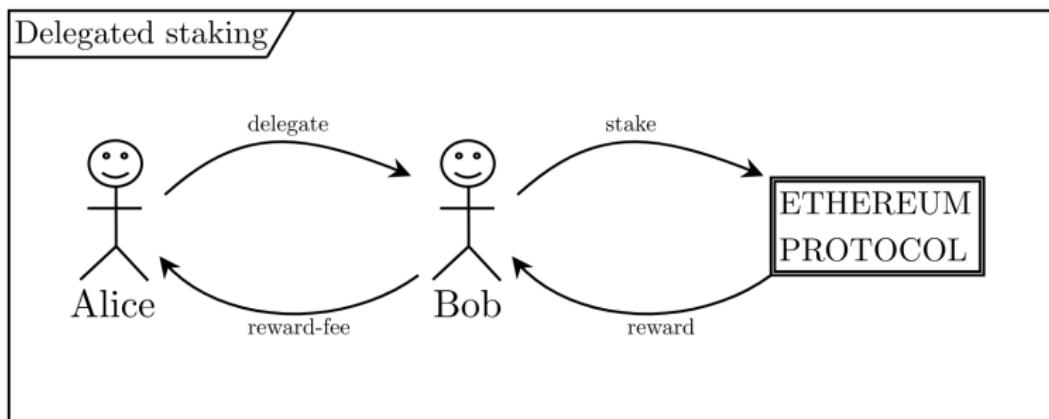
Self staking



- Alice stakes her own capital and earns rewards for doing so.

Staking

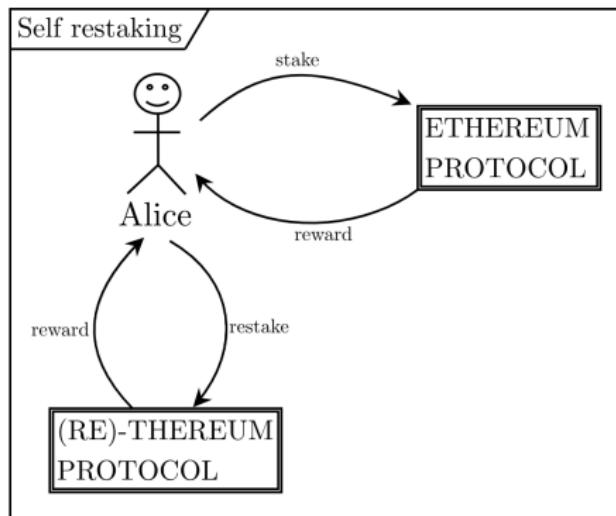
Delegated staking



- Alice *delegates* the task of interacting with the protocol to Bob, who does so for a fee.
- There exist many “modes” of delegation with different levels of trust: e.g., (i) custodial, (ii) non-custodial but DAO-governed, (iii) trust-minimized.

Restaking

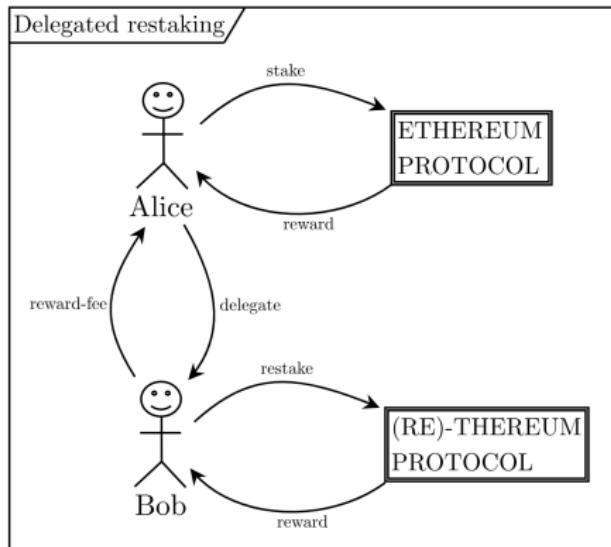
Self restaking (native)



- “Restaking”, as originally defined, reuses the same capital in another protocol – e.g., (RE)THEREUM.
- The capital is further “encumbered” by additional protocol rules.

Restaking

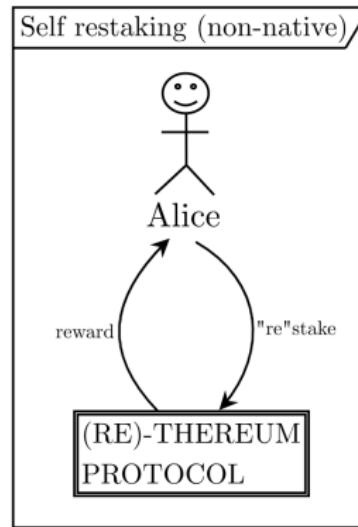
Delegated restaking (native)



- Under delegated restaking, the stake is accountable for the actions of *two* people under *two* different protocol rules.
- This model is dubbed “native” because Alice is still interacting with Ethereum directly (... *hint hint*).

Restaking

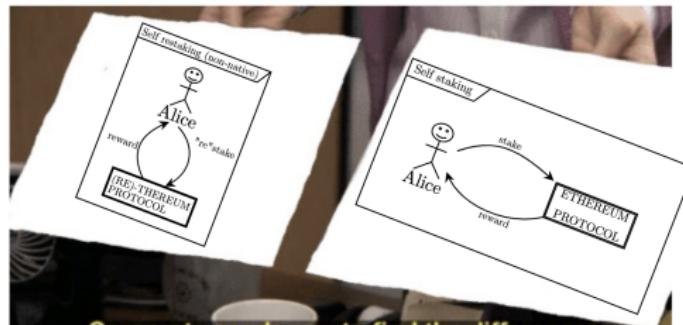
Self restaking (non-native)



- Alice could just “re” stake non-native tokens directly with (RE)-THEREUM.
- Now a restaking platform becomes a “marketplace for decentralized trust” (a.k.a. a place to buy & sell stake).

Restaking

meme

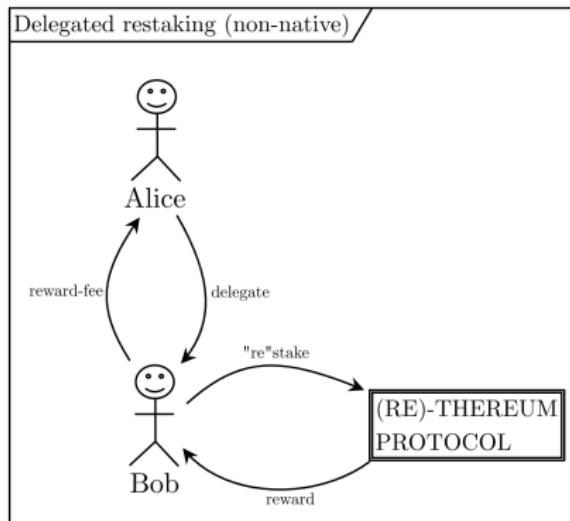


Corporate needs you to find the differences
between this picture and this picture.



Restaking

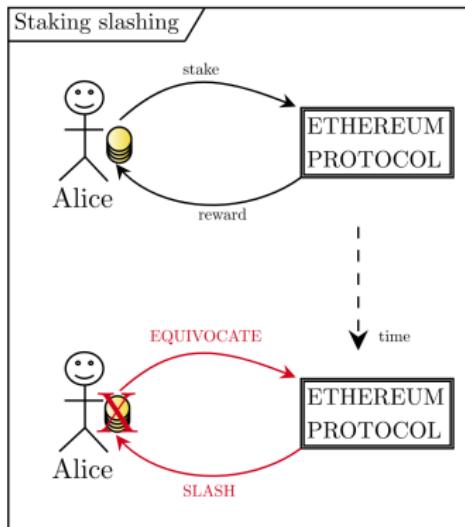
Delegated restaking (non-native)



- ... this looks a lot like regular delegated staking.

Liquefaction

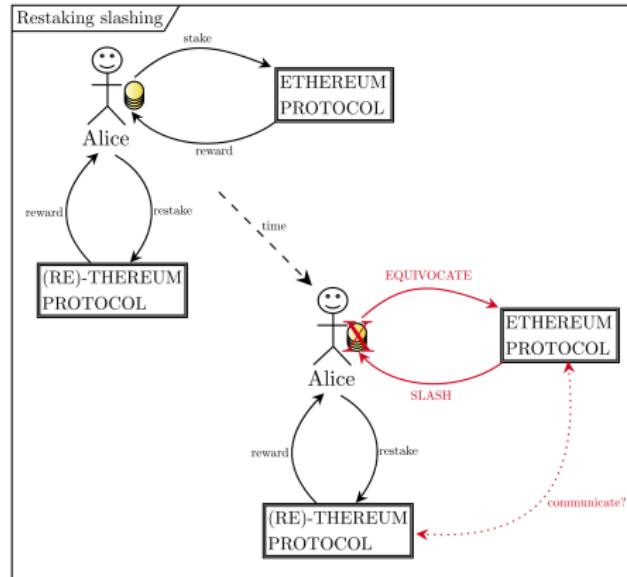
Slashing



- Recall that stake is “collateral-at-risk” to provide *accountability* (the protocol’s “stick”).
- Under normal staking, slashing is quite well understood.

Liquefaction

Restaking & Slashing (reslashing?!)

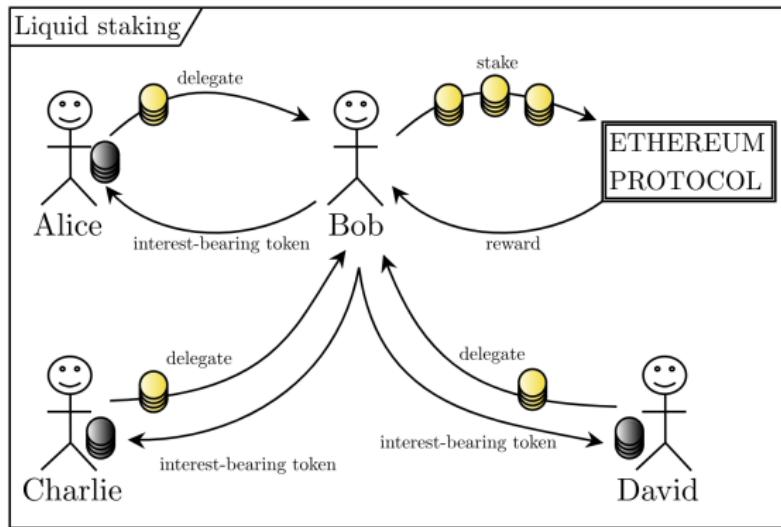


- Even in the simplest restaking model, slashing can get quite tricky...
- Especially when “slashing violations” are not necessarily objective.³

³ EIGEN: The Universal Intersubjective Work Token

Liquefaction

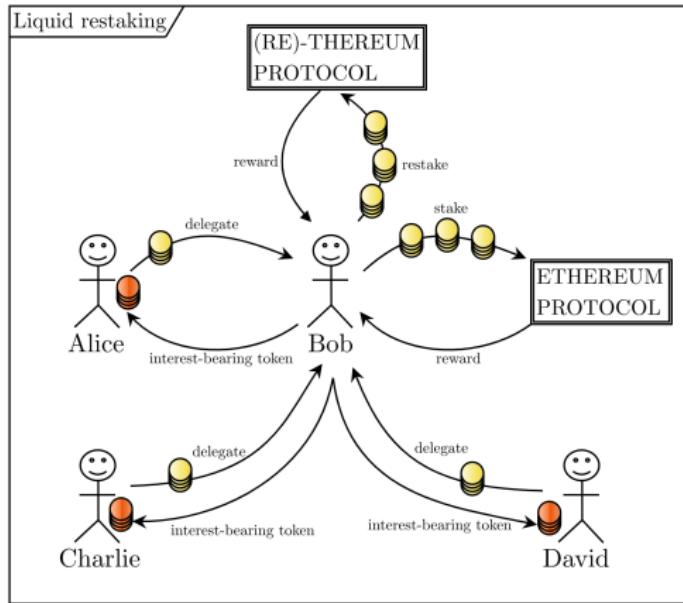
Liquid Staking Tokens (LSTs)



- Bob issues interest-bearing tokens to those delegating; the fungibility of this token depends on Bob's actions (the slashing risk is spread across holders (and anyone who relies on the value of the liquid derivatives (e.g., someone who issues a loan against them))).

Liquefaction

Liquid Restaking Tokens (LRTs)



- Bob issues interest-bearing tokens to those delegating; he still underwrites the fungibility but now the stake is encumbered by multiple sets of slashing conditions.

thanks! :-)

