



# Introduction to Cryptium Labs

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# Cryptium Labs

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Validation

Development  
Research

Community



# Introduction to Liquid PoS

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# What is Proof-of-Stake?

- Alternative to Proof-of-Work
- There are many variants: e.g. Liquid Proof-of-Stake (Tezos)
- Some of them suffer from **Nothing-at-Stake Problem** (e.g. DPoS)
- Requirements for Participating as a Validating Node (Baker)

# The Role of Token Holders

- *Hodling* is economically discouraged
- PoS Networks introduce two new stakeholders into the ecosystem:
  - **Validators:** participate directly in consensus
  - **Delegators:** participate indirectly
- On-Chain Governance
  - In some networks only validators will have voting power proportional to their total stake
  - In others, delegators have the power to overwrite the vote of the validators

The **security & decentralisation** of these networks rely on the decisions of token holders, be it **by validating or delegating**

– *Letter to Current & Future Delegators* ([Link](#))

# LPoS: Rewards and Penalties

## REWARDS

- **16 XTZ** / block + fees
- **2 XTZ** / endorsement
- Voting for future protocol upgrades

## PENALTIES

- **512 XTZ** per double-baked block
- **64 XTZ** per double-endorsed block



# How do Baking & Endorsing Slots Get Assigned?

- $10,000 \text{ XTZ} = 1 \text{ Roll}$
- $\text{Baker A Rolls} / \text{Total Rolls}$   
= Likelihood of receiving a  
slot



# Recommended Reads

- I. [Letter to Current and Future Delegators](#)
- II. [The Hitchhiker's Guide to Tezos](#) (English | Chinese | Spanish)
- III. [Understanding Overdelegation](#)
- IV. [Introduction to Proof-of-Stake and Rewards](#)
- V. [Understanding Inflation](#)
- VI. [Expected Rewards from Solo Baking](#)

# Reach Out

- **Mail:** hello@cryptium.ch
- **Twitter:**  
<https://twitter.com/cryptiumlabs>
- **Blog:** <https://medium.com/cryptium>
- **Telegram:** <https://t.me/cryptiumlabs>

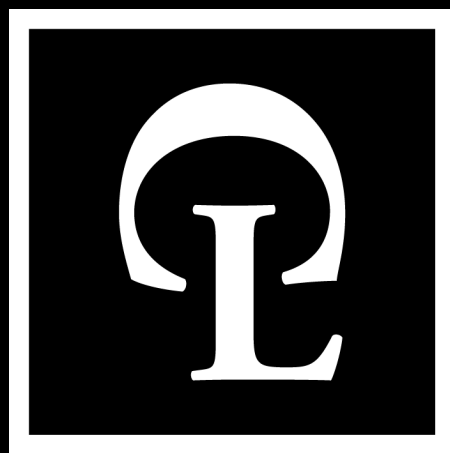
- **LinkedIn:**

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- **Website:** <http://tezos.cryptium.ch/>

- **GitHub:**

<https://github.com/cryptiumlabs>



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