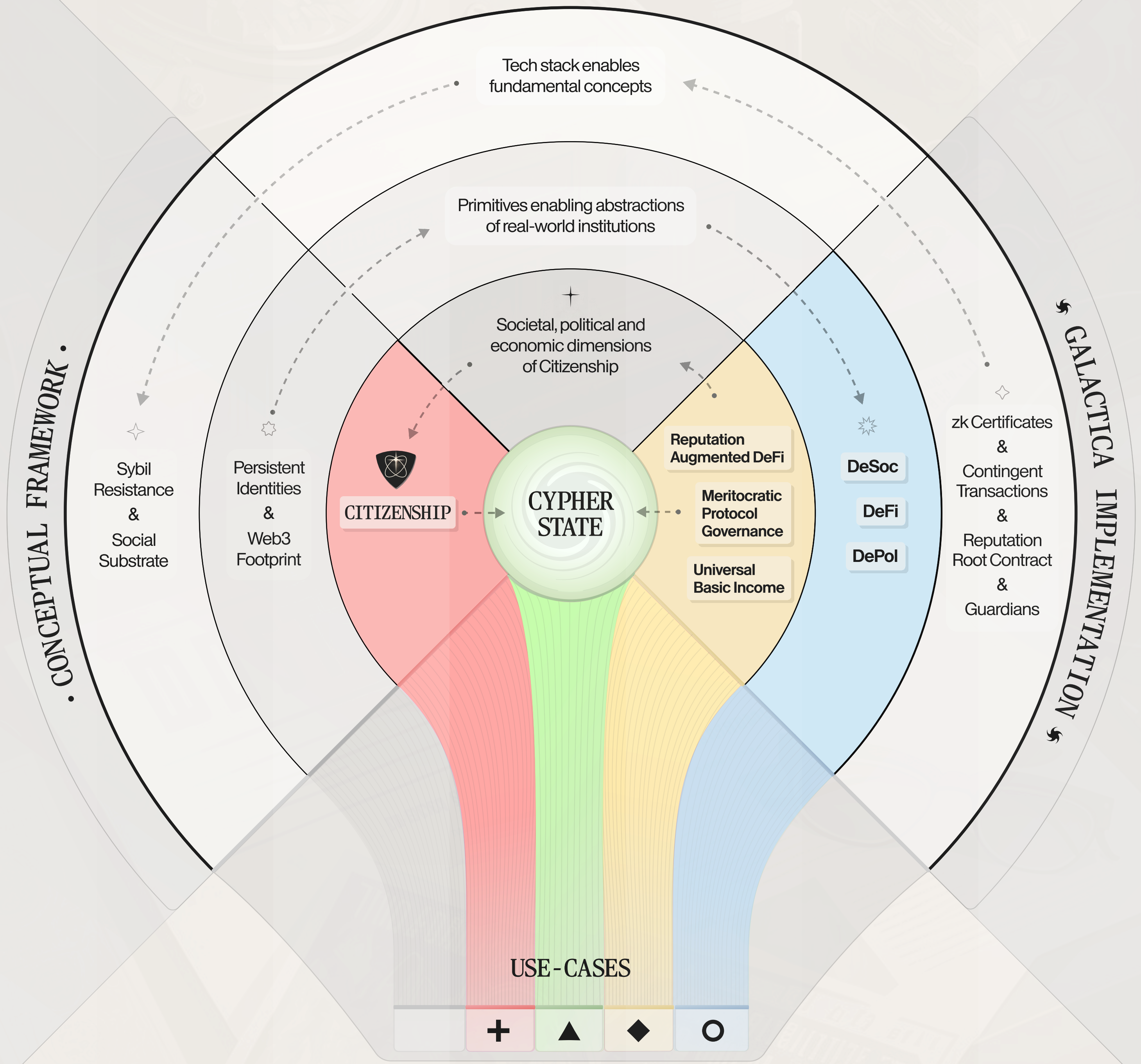




GALACTICA NETWORK

USE - CASES





CONCEPTUAL FRAMEWORK

GALACTICA IMPLEMENTATION

USE-CASES

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DeFi

DeFi

zkKYC enabled Sybil resistance and meaningful web3 footprint transforms the DeFi landscape enabling reputation-augmented primitives, such as undercollateralized lending.



DePol

DePol

Persistent identities are leveraged to design reputation augmented, merit-driven governance mechanisms.



DeSoc

DeSoc

The notions of **Persistent Identity** and **Web3** footprint together enable non-trivial societal institutions to be modeled entirely on-chain.



Guardians

+ x +



dApp access restrictions DeFi

Through contingent transactions and zkCertificates, one can achieve web2 levels of compliance, all of which automated and composable. For example:

- A user interacting with a perpetual products DEX only contingent upon one being **over 18 years** of age and being categorized as an Accredited Investor;
- A user interacting with a DApp only contingent upon one not being a citizen of a prohibited jurisdiction;



AML proofs DeFi

Fast generation of proofs that all the accounts registered under one's name have only interacted with liquidity of KYC'ed users without revealing any other information.

One can generate programmable proofs of compliance without giving up one's privacy;



DeFi for social groups

DeFi

Heterogeneous DeFi for heterogeneous human profiles:

- Creating a staking DApp with yield boosters for residents of a certain jurisdiction (i.e. affected by a natural disaster or femine);
- A DAO registered in an offshore jurisdiction managing a platform that excludes residents of said jurisdiction;



Compliant privacy

DeFi

DeSoc

Compliant privacy roll-ups and DApps whereby users can retain the privacy of transactions without compromising compliance.

For example, if a privacy roll-up is accessible exclusively to KYC'ed users and supports generation of arbitrary proofs about transactions settled therein.

Read the article:

[Achieving Crypto Privacy and Regulatory Compliance](#) 



TradFi compliance on-chain

DeFi

DeSoc

Galactica Network as a platform for TradFi interactions of arbitrary complexity:

- Interbank liquidity pools accessible only to registered financial institutions and their institutional clients;
- Institutional DeFi with programmable compliance, such as complex derivatives only available to subaccounts of institutional accounts of various regulated financial institutions with >15% Tier 1 capital ratios;

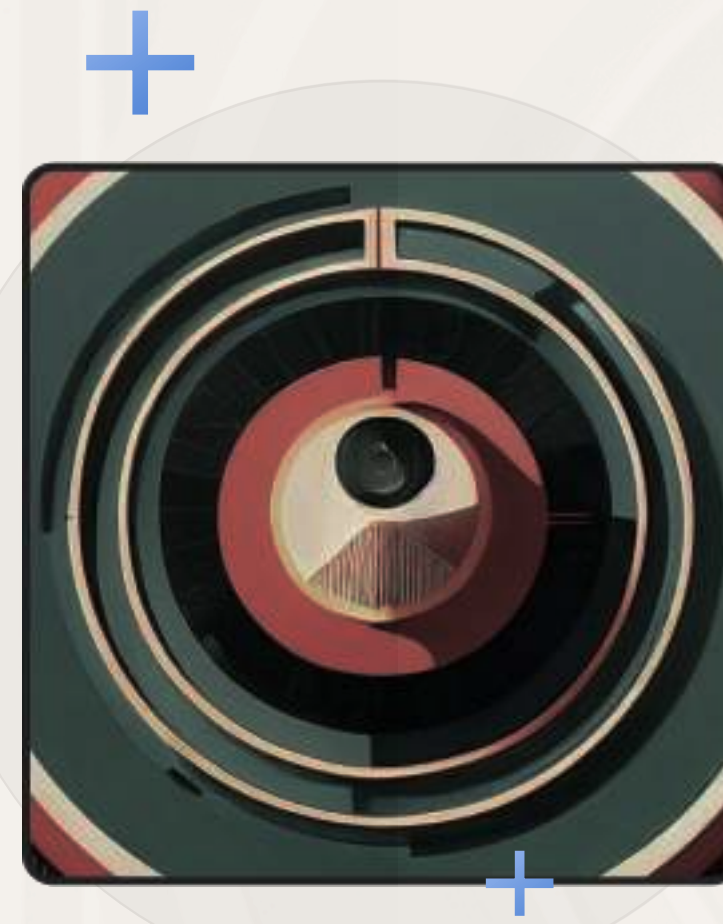


RWA on-ramps

DeFi

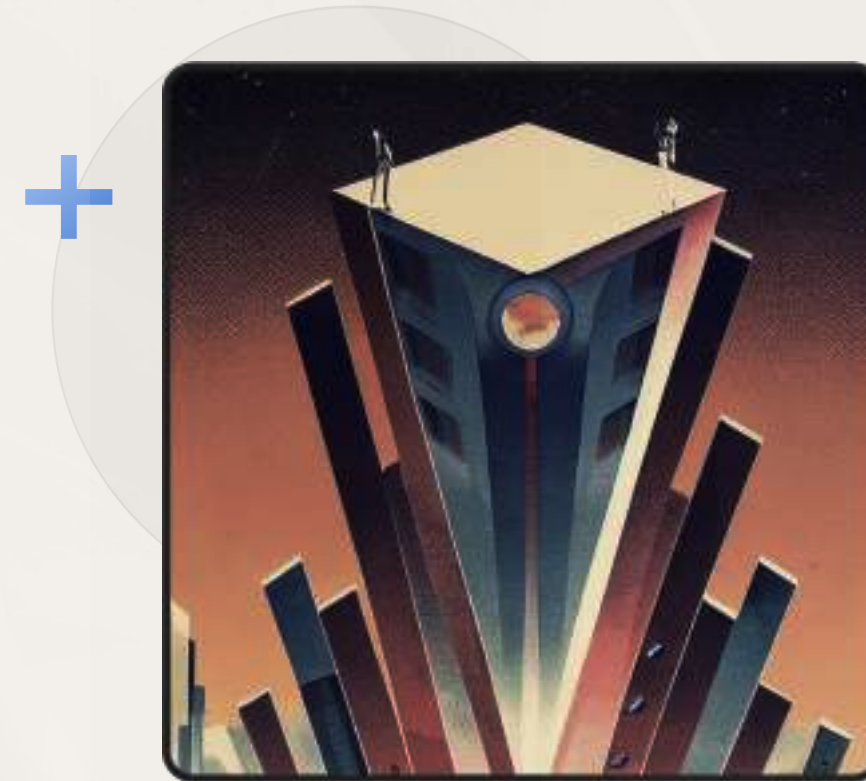
+ Ability to put up Real World Assets (RWA) as collateral:

Today, the vast majority of liquidity of non-financial asset classes remain entirely off-chain primarily due to compliance reasons. Held by institutional players, it cannot currently be deemed prudent to tokenize and expose to DeFi liquidity.



Security tokens DeFi

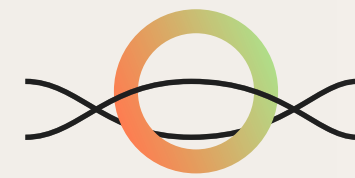
Forward enterprise financing of **security tokens** and availability of said tokens on decentralized trading venues available only to accredited investors;



CeDeFi DeFi

Direct integration into traditional banking

— the coexistence of DeFi and CeFi in a public ledger setup can be symbiotic as by any measure it would offer higher degree of transparency than either of the two paradigms alone;



Reputation-Augmented DeFi





Heterogeneous account DeFi DeFi DeSoc

DeFi where terms of interactions are different for every user depending on one's web3 footprint.

Dynamic collateral rates for users depending on their credit history.



Undercollateralized DeFi DeFi DeSoc


A major use case not attainable in non-reputation augmented web3: <100% collateral rates for users with certain history of transactions and social interactions.




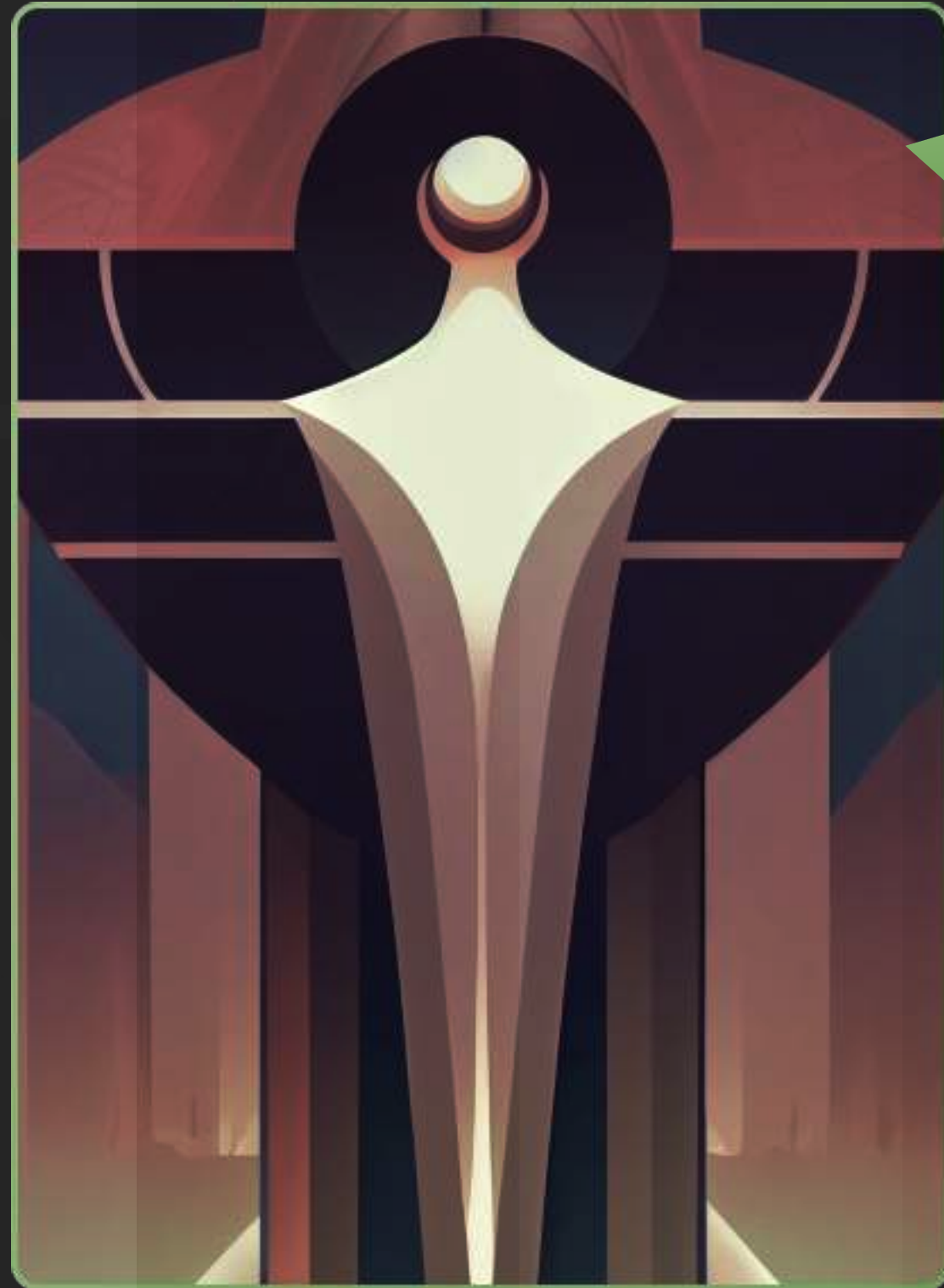
Dynamic access DeFi

DeFi DeSoc

Dynamic access to DApps depending on any dimension of one's Web3 footprint, such as being an early adopter of and an LP in a DApp enables access to a 0% collateral pool a different DApp.




SocialFi & DeSoc



+

Persistent identities

DeSoc

zkKYC massively increases the cost of sybil attacks, while not requiring disclosure of personal data.

Primitives like quadratic voting and quadratic funding can now be realized natively (see meritocratic governance).

Social media and Web3 footprint DeSoc



Karma of one's on-chain social media account now has relevance due to existence of Persistent Identities. As time goes by, web3 footprint grows enabling further account heterogeneity.



Social key recovery DeSoc

One can program a dynamic whitelist of accounts (closest friends from decentralized social network, DAOs that one interacts with the most, etc.) that can restore one's private keys.



Merit & relevance DePol DeSoc

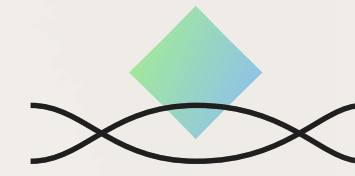
Selecting only individuals who have attended particular hackathons and have positive attestations to have veto rights within a developers DAO.



Media reputation DeSoc

The use cases for journalism are especially intriguing as a **reporter under this system should have a social score of accuracy/quality of journalism**, while the same score could be aggregated across journalists of a given media outlet.





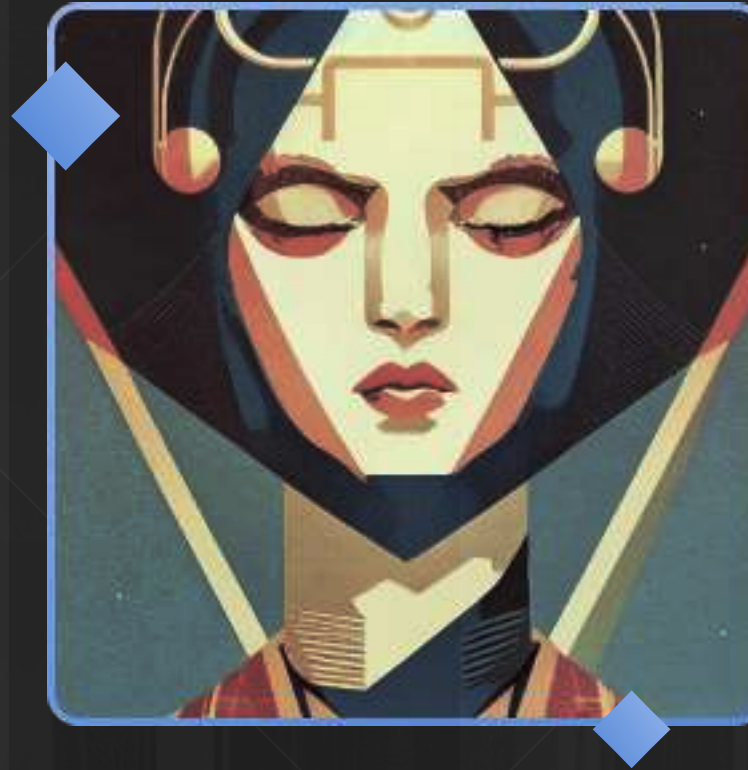
Meritocratic Governance





Quadratic distributions DePol DeSoc

Projects that favor decentralization in governance and economic power **could employ quadratic funding and voting mechanisms** that are well known to be extremely vulnerable to Sybil attacks;



Merit-weighted voting power DePol

User merits build up one's reputation over time. Those adept in applied cryptography are more likely to have an educated opinion when voting on a respective topic. Hence, their VP should be higher.



Retroactive funding DePol DeSoc

This practice is known to reduce moral hazard among other things, yet it involves highly subjective evaluation/pricing phase. **Reputation-weighted anonymous votings can solve the oracle problem.**



Expert forums DeSoc DePol

Sufficient karma across social media DApps and cryptography-oriented forums enable one to gain higher voting power in cryptography related votes.

Galactica Network Citizenship

DePol

DeSoc

DeFi

Galactica Network Governance

Validator Operations

Access to Citizen-only DApps

Universal Basic Income

Real World Assets

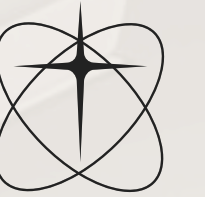
Social DAOs

Ecosystem Grants

GNC is the first implementation of Protocol Citizenship

As such, protocols generate value (transaction fees, IP, various network effects, DApps, etc.). Protocol Citizens have contingent claim on this value (like validators and miners for contributing to network security) and can influence its distribution through political process.

As such, protocols require inputs, technological, economic, social, etc. to thrive. Protocol Citizens are expected to contribute such value.



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