

State of Ethereum Governance

Lane Rettig
The Interwebs, 9 May 2019

Intro

Outline

- Some history
- Ethereum governance today
- Challenges & case studies
- Relevance to various fields
- The road forward
- Working group findings
- Q&A

Outline

- **Some history**
- Ethereum governance today
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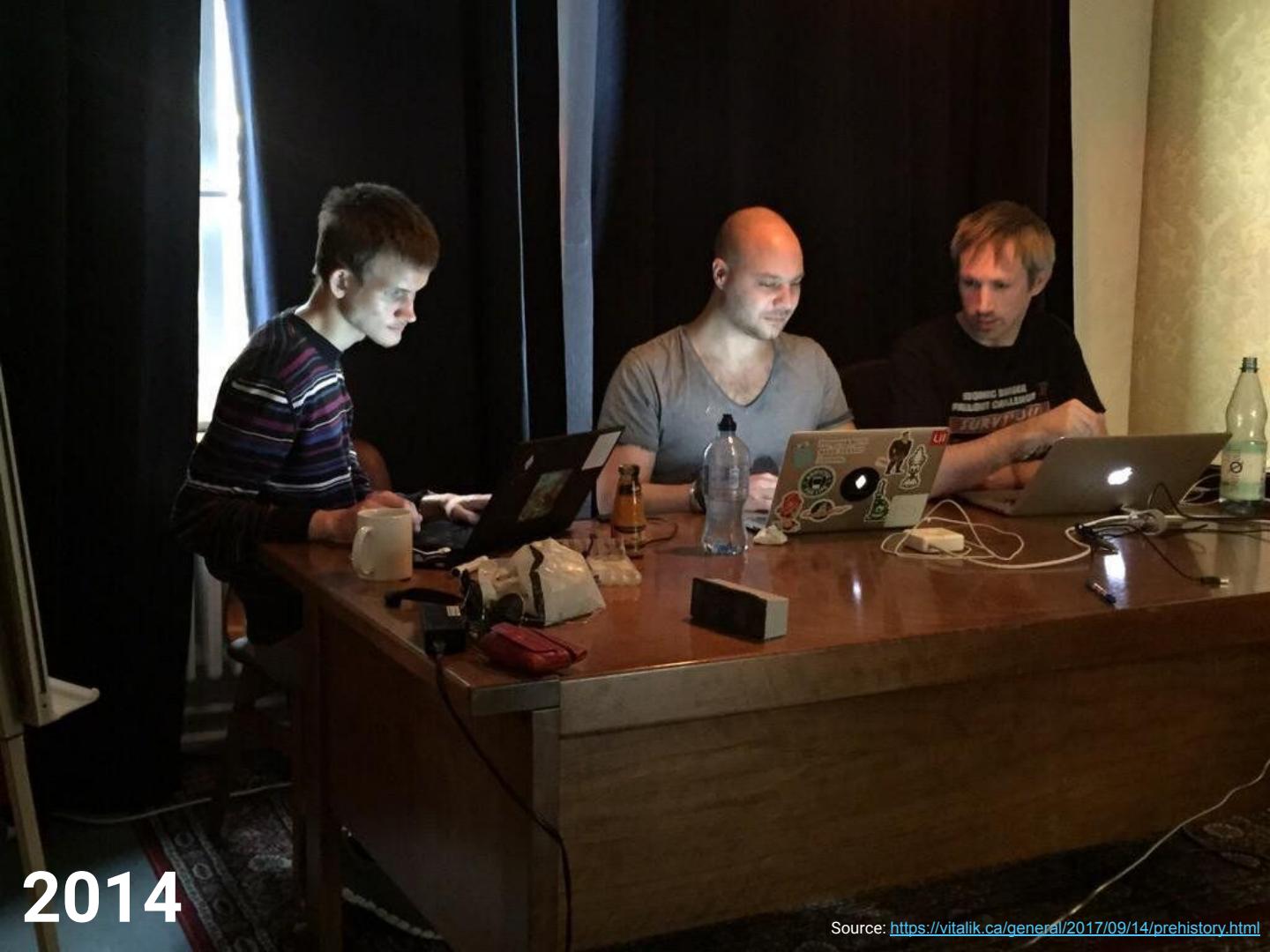
Some history

A brief timeline

July 2015	Mainnet launches
June 2016	The DAO hack
October 2017	Byzantium upgrade
June 2018	Sharding + casper workstreams merge
November 2018	Eth1x conceived
February 2019	Constantinople upgrade
Q4 2019	Eth1x, Eth2 Beacon chain launch
2020-2021	Eth2 phases 1-2

Ethereum's social
evolution:
a slide show

2014



Source: <https://vitalik.ca/general/2017/09/14/prehistory.html>

2014



Source: Taylor Gerring



2014

Source: Taylor Gerring, <https://ethereum.stackexchange.com/questions/460/ethereum-conferences>



2015

Source: <https://blog.ethereum.org/2016/02/09/cut-and-try-building-a-dream/>

2016





2017

Source: <https://www.trustnodes.com/2017/11/01/ethereum-fallen-love-300-even-devcon3-opens>



2018

Source: <https://www.technologyreview.com/s/612507/ethereum-thinks-it-can-change-the-world-its-running-out-of-time-to-prove-it/>



Google



↪ allcoredevs11



Christian

M
Guest



Enter chat message or link here



3/2017

▶ ▶ 🔍 0:01 / 1:24:02



Source: <https://github.com/ethereum/pm>



Group chat

To list all available commands enter */?*.

Casey Detrio can now join this call.

Casey Detrio joined group chat.

M Bz can now join this call.

Vitalik Buterin can now join this call.

M Bz joined group chat.

Christian Reitwiessner joined group chat.

Vitalik Buterin joined group chat.



1/2019

Daniel Heyman

Lane Rettig

Shahan Khatchadourian

zak

Tim Beiko

Dino m

danny

Afri @5chdn

Anton Nashatyrev

Antoine Toulme

Dan Burnett

Joseph Lubin

Olivier Begassat

Joseph Chow



Alex (axic) + Jake +...

Fredrik Harrysson

Brooklyn Zelenka

Pawel Bylica

Martin Holst Swende

Mikhail Kalinin (mka...)

Hsiao-Wei Wang (re...)

Alexey Akhunov

Vitalik

dvd





Source: Lane Rettig



Source: Lane Rettig

Outline

- Some history
- **Ethereum governance today**
- Challenges & case studies
- Relevance to various fields
- The road forward
- Working group findings
- Q&A

Ethereum governance today

Governance of blockchain Governance *by* blockchain

Governance of blockchain
~~Governance by blockchain~~

What is Ethereum?

a.k.a., “What are we governing?”

- The Ethereum Foundation, resources (i.e., meatspace and specific)
- The community (also meatspace, but vague)
- Core protocol (i.e., the specification)
- Client implementations (i.e., repositories)
- The network (i.e., the hardware and network layer)
- The blockchain (i.e., the data layer)
- Blockchain applications (i.e., the application layer)

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Ethereum 1 implementations

Ethereum clients run the [Ethereum Virtual Machine](#) and are written in a programming language. Clients include:

- Geth (Go) [wiki](#), [repo](#), [issues](#), (fully working, i.e. passing all JSON tests for the VM, plus can run a full node)
- Parity (Rust) [wiki](#), [repo](#) (fully working)
- cpp-ethereum (C++) [docs](#), [repo](#) (fully working)
- pyethapp (Python) [wiki](#), used for [Casper FFG](#), [repo](#). Includes [py-ethereum](#), which in turn includes [Serenity](#) R&D.
- [py-evm/Trinity](#) (Python, has a sharding implementation under development), a full client (near completion as of late April 2018) (working)
- [ethereumjs-vm repo](#) (Javascript)
- [EWasm](#), just an alternative to the EVM that is compliant with the EVM ABI.
- [Sharding implementations](#) for Geth by Prysmatic Labs, Parity by Drops of Diamond, py-evm, Pegasys, and Nimbus.
- [Harmony/ethereumj](#) (Java) (fully working)
- [Extherium](#) (Elixir) (fully working EVM implementation, not a client).
- [ciri](#) (Ruby) (WIP)
- [Solidity](#) [EVM](#) (Poc), not intended to be a complete client, just for runtime one-off execution.

Plus [more](#).

Ethereum 2 implementations

Team	Client	Language	Funding
Prysmatic Labs	Prysm	Go	\$500k - EF Grant Wave 4 \$200k - WXblockchain \$100k - Grant Wave 1 \$100k - Aragon Nest \$100k - ECF grant \$100k - Vitalik YOLO fund \$50k - District0x \$25k - SpankChain Funded by Gitcoin Grant Donation address
ChainSafe	Lodestar	JavaScript	\$100k - Vitalik YOLO fund \$10k for team member Mikerah from EF Funded by Gitcoin Grant
PegaSys	Artemis	Java	Funded by ConsenSys
Harmony	Harmony	Java	\$90k - EF funded Grant Wave 3
Parity Technologies	Substrate Shasper	Rust	\$5mil - EF Special Grant Funded by Parity Technologies
Sigma Prime	Lighthouse	Rust	\$150k - EF Grant Wave 4 \$100k - Vitalik YOLO fund Funded by Sigma Prime Funded via Gitcoin grant
Status	Nimbus	Nim	\$500k - EF Grant Wave 4
Ethereum Foundation	Trinity	Python	\$80k - EF Funding
Yeeth	Yeeth	Swift	Funded via Gitcoin Grant

Current governance structure

Ethereum governance today exhibits characteristics of:

- Plutocracy
- Technocracy
- Oligarchy
- Aristocracy
- Theocracy
- Meritocracy
- Ergatocracy

IETF

“The IETF's mission is ‘to make the Internet work better,’ but it is the Internet Engineering Task Force, so this means: make the Internet work better from an engineering point of view. **We try to avoid policy and business questions, as much as possible.** Most participants in the IETF are engineers with knowledge of networking protocols and software. Many of them know a lot about networking hardware too.”

We reject: kings, presidents and voting.

We believe in: rough consensus and running code.

- David D. Clark

Humming to gather rough consensus

Internet Engineering Task Force (IETF)
Request for Comments: 7282
Category: Informational
ISSN: 2070-1721

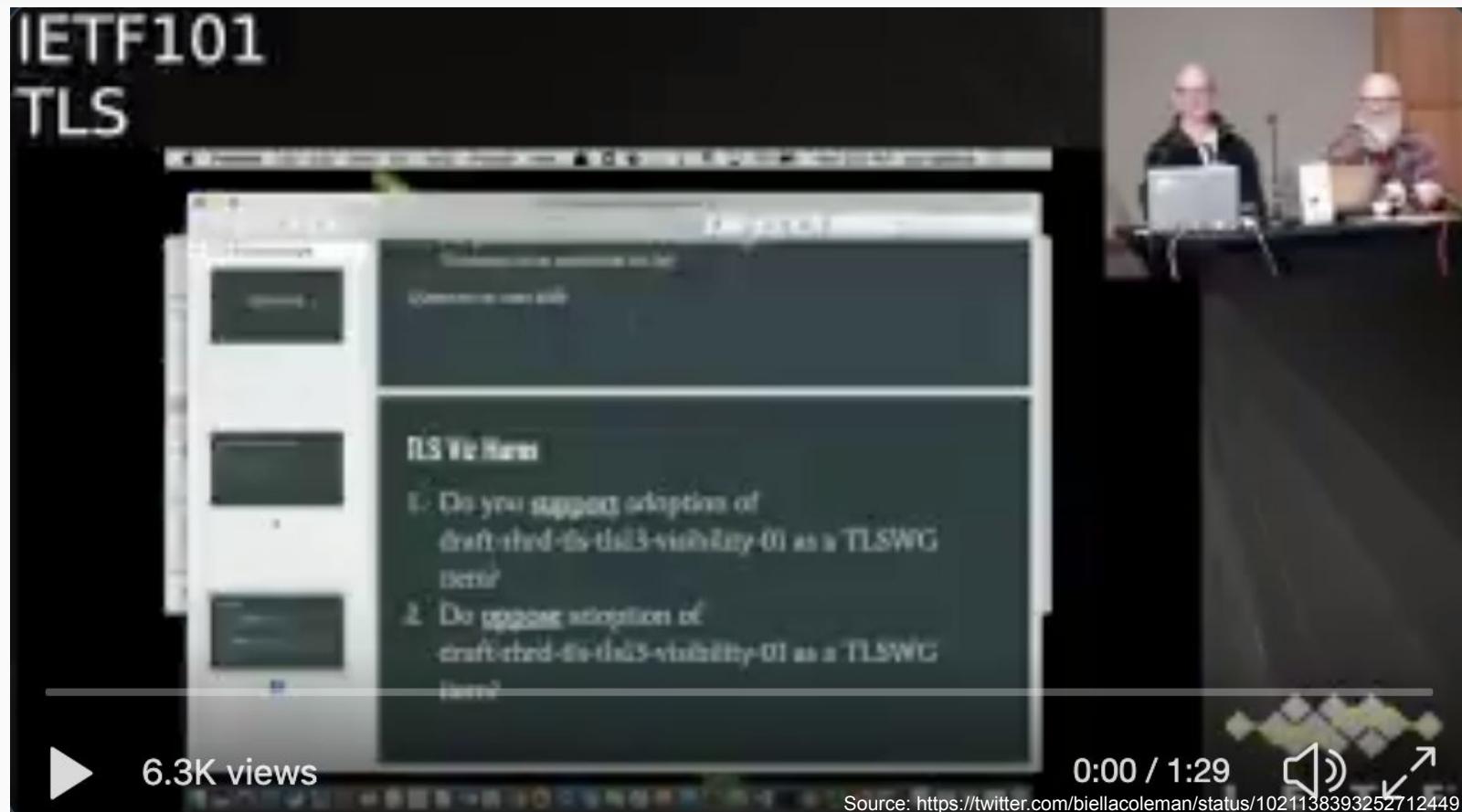
INFORMATIONAL
Errata Exist
P. Resnick
Qualcomm Technologies, Inc.
June 2014

On Consensus and Humming in the IETF

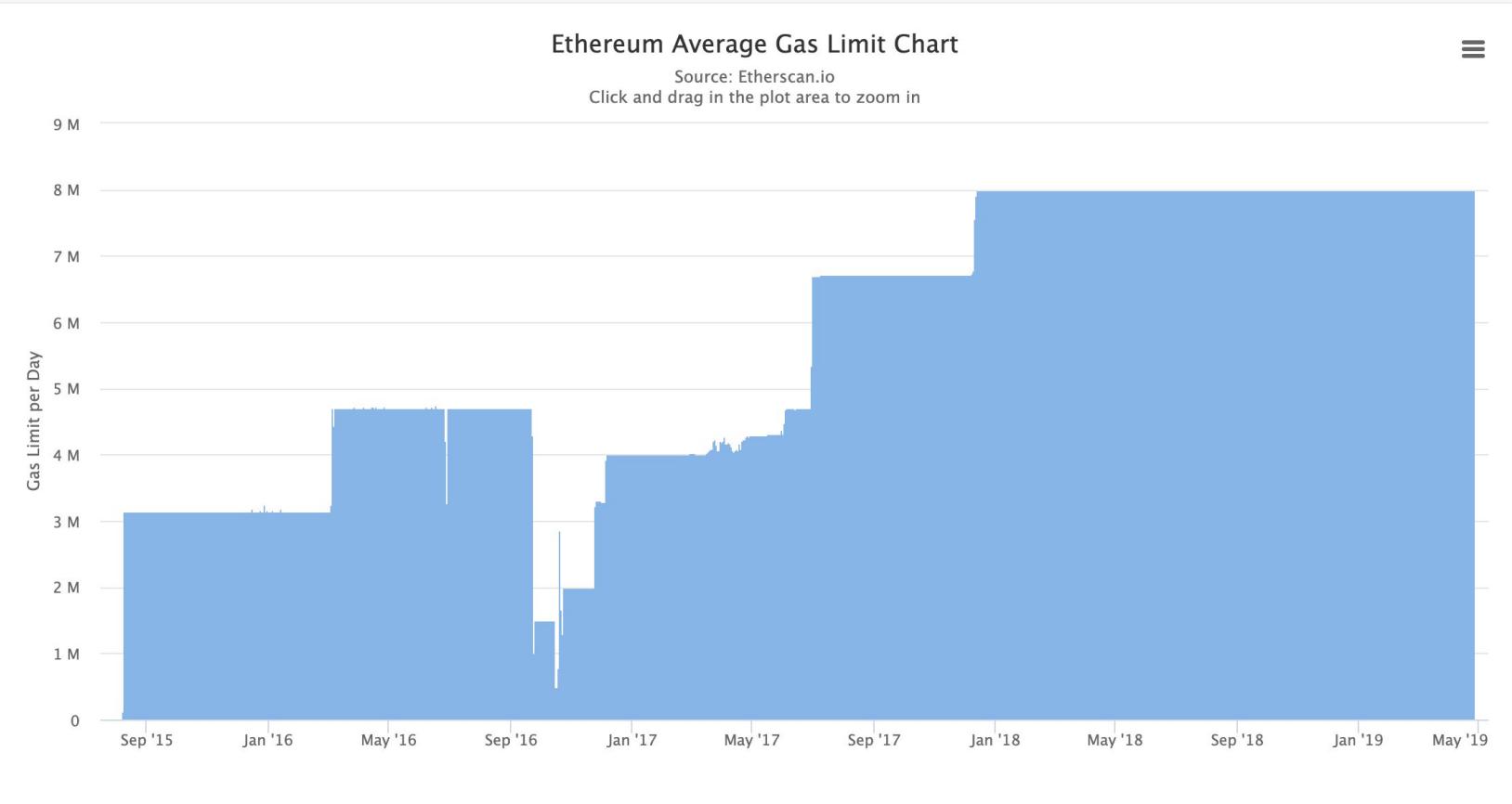
Abstract

The IETF has had a long tradition of doing its technical work through a consensus process, taking into account the different views among IETF participants and coming to (at least rough) consensus on technical matters. In particular, the IETF is supposed not to be run by a "majority rule" philosophy. This is why we engage in rituals like "humming" instead of voting. However, more and more of our actions are now indistinguishable from voting, and quite often we are letting the majority win the day without consideration of minority concerns. This document explains some features of rough consensus, what is not rough consensus, how we have gotten away from it, how we might think about it differently, and the things we can do in order to really achieve rough consensus.

Humming to gather rough consensus



All off chain except...



Processes/mechanisms

Formal:

- EIP process
- All core devs

Informal:

- All core devs
- DevCon, conference sidebars
- Telegram and Gitter
- Twitter, Reddit
- Carbonvote
- Tennagraph
- Miner vote
- Lots and lots of regular calls
- EIP0
- “The roadmap”
- Tyranny of structurelessness?

Stakeholder groups

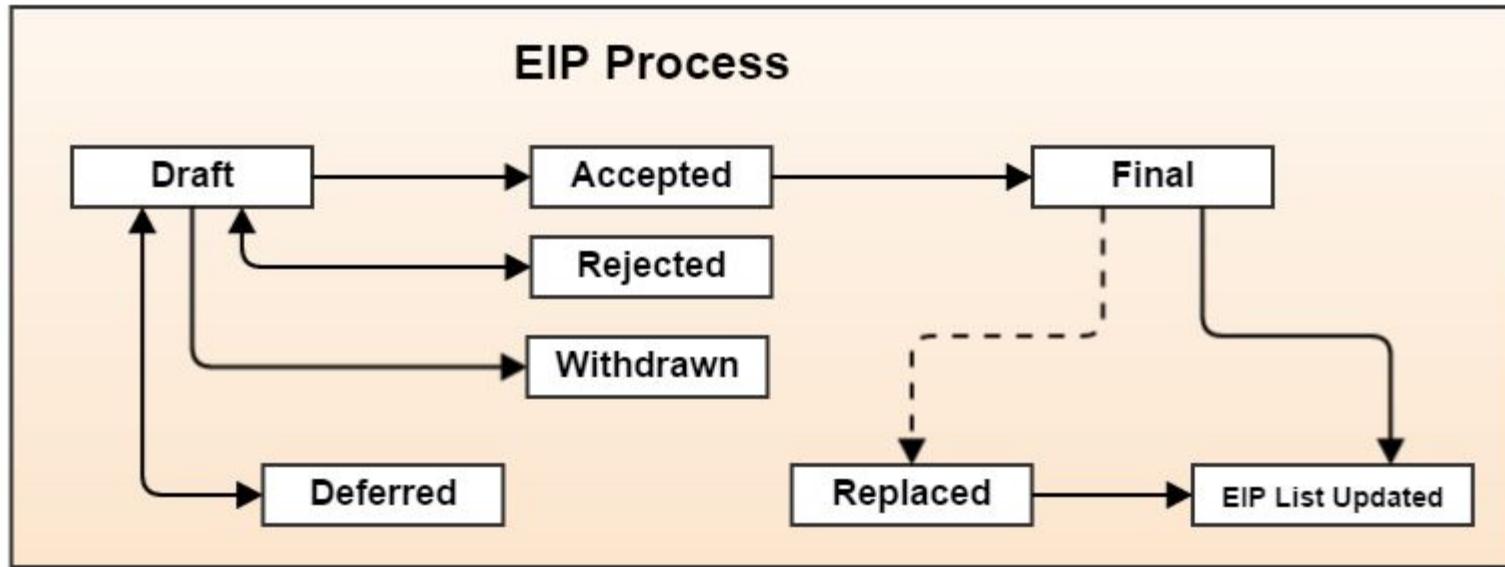
Formal:

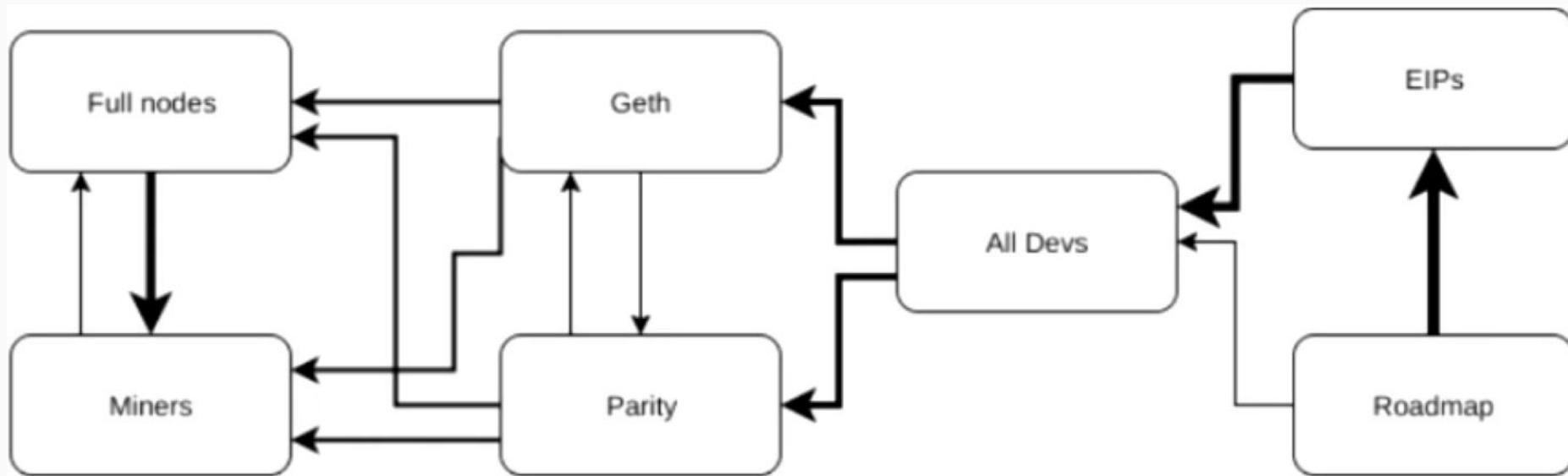
- Ethereum Foundation
- ConsenSys
- Parity
- Web3 Foundation
- Infrastructure (Infura, Metamask, MyCrypto, etc.)

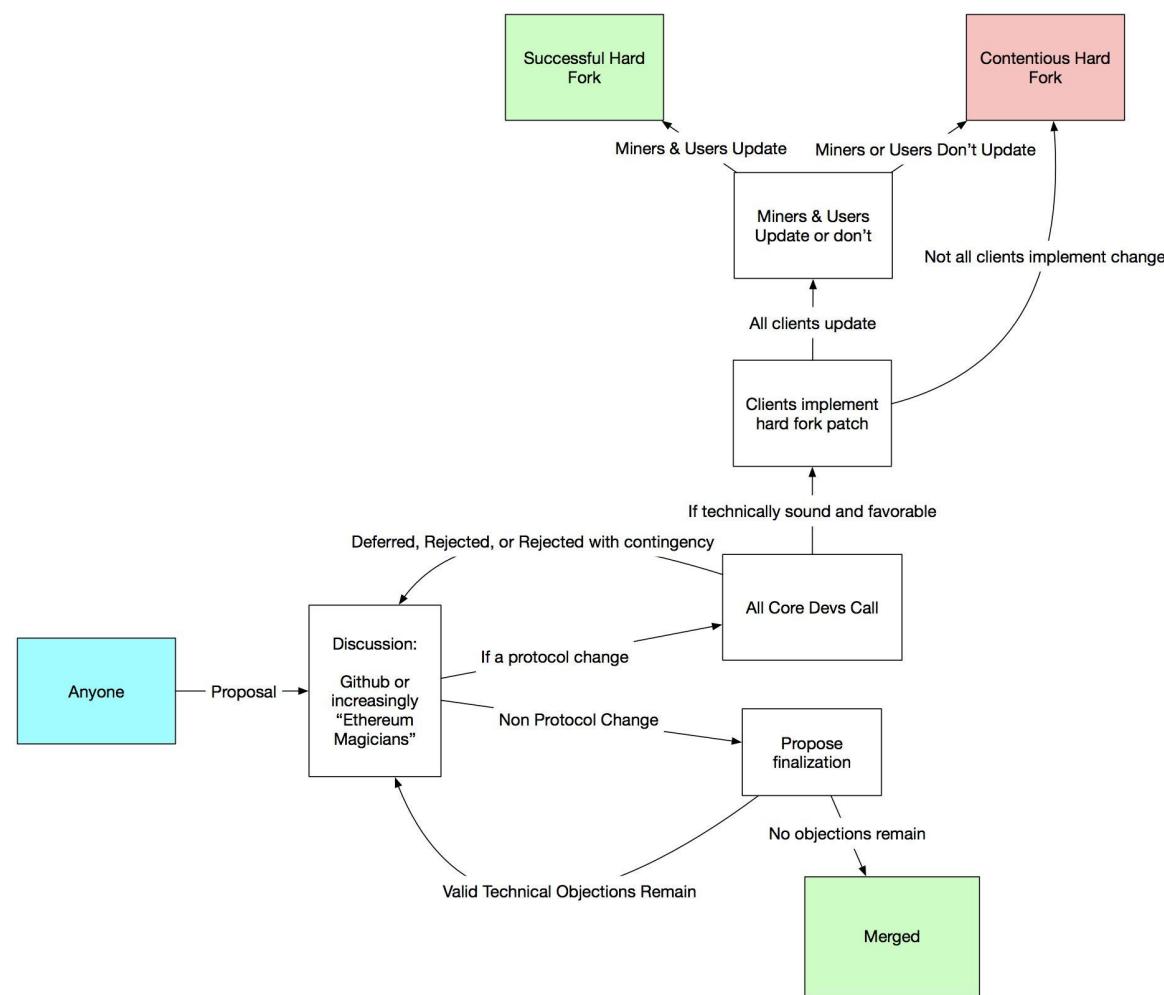
Informal:

- Core developers
- Fellowship of Ethereum Magicians
- Cat Herders
- EIP editors
- App developers
- Miners/validators
- Investors/hodlers
- EthHub
- “The community”

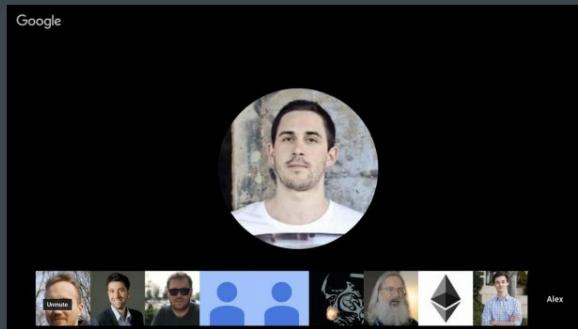
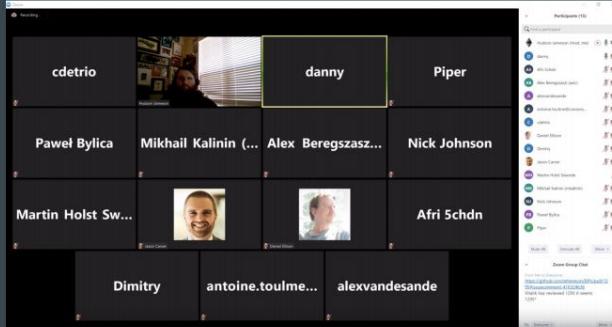
One formalized governance mechanism!







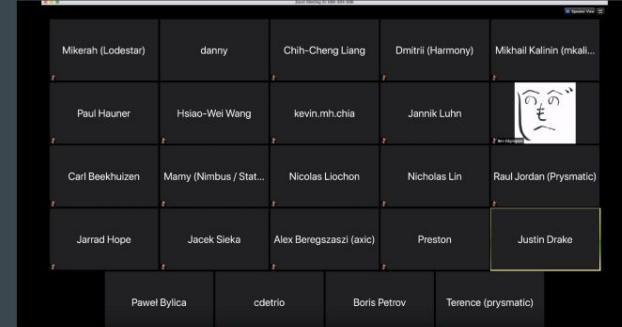
All Core Devs Call



EWASM Community Call



Eth Implementers 2.0



Plasma Implementers Call

Source: Hudson Jameson

← EIP 1013: Hardfork Meta: Constantinople

[Core](#)[Draft](#)

Coinvoting ?

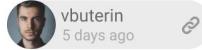
Coinvoting has not been enabled for this EIP. Deploy the smartcontract via meta-mask to begin.

[START COINVOTING](#)

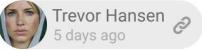
Influencer Stances by Rank ?



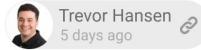
Yay (35)



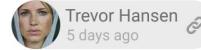
vbutterin
5 days ago



Trevor Hansen
5 days ago



Trevor Hansen
5 days ago



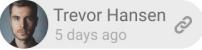
Trevor Hansen
5 days ago

+ 76 more

Nay (2)

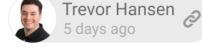


Trevor Hansen
5 days ago



Trevor Hansen
5 days ago

Abstain (1)



Trevor Hansen
5 days ago

Something wrong in the stances? DM us at @tennagraph to edit or remove stances

[all categories ▾](#)
[Categories](#)
[Latest](#)
[New \(3\)](#)
[Unread \(32\)](#)
[Top](#)
[Bookmarks](#)
[+ New Topic](#)

Category

Topics

Latest

EIPs

Discussions about specific EIPs (improvement proposals), and general proposals which may become EIPs. If applicable, specify the EIP issue # in the topic title.

Core EIPs 1 new Last Call

10 / month

8 unread

2 new

20

3h



Precompile for general elliptic curve linear combinations 9

Working Groups

11 / month

7 unread

1 new

3

3h



Generalised Precompile for Elliptic Curve arithmetics and pairings Working Group

- Ethereum 1.x Ring 5 unread Token Ring Dev Tools Ring 1 new
- Integrity Ring Eth2.0 Networking Ring
- Constrained Resource Client Ring 1 unread Mobile Ring
- Wallet Ring 1 unread Multisig Ring Fund Recovery Ring
- Provider Ring Signaling Ring Data Ring
- Education Ring Ethereum Architects UX Ring
- Product Management Ring Mobile Wallet Ring
- Hardware Wallet Ring Security Ring Desktop Wallet Ring

Process Improvement

4 / month

5 unread

15

9h



Finality gadget for Ethereum1x Working Group 3

Discussions about general governance within the Ethereum community, and about specific forms of governance such as the EIP workflow and Ethereum hard forks.

Primordial Soup

9 / month

6 unread

33

10h



EIP-1559: Fee market change for ETH 1.0 chain 3

This topic category is for discussions of potential standards or potential technical solutions. Perhaps it starts with a problem that needs to be addressed, an experiment, or an abandoned standard.

Action Item

2 / month

2 unread

148

14h



EIP-615: Subroutines and Static Jumps for the EVM 58

Timely requests made to the Fellowship and the wider Ethereum community.



EIP-1352: Specify restricted address range for precompiles/system contracts 3

16h

Whisper v2: Request for requirements for



Source: Lane Rettig

all categories ▾

Latest

Topic

Replies

Views

Activity

Welcome to the EthHub Community Forum

The goal of this community is to give a voice to anyone interested in Ethereum. This includes users, investors and developers. We hope that these discussions can be used as a signal in the Ethereum governance process and... [read more](#)



2

124

10d

ENS for mainstream adoption

Community



5

32

8h

The 'introduce yourself' thread 8

social



74

817

22h

Eth 2.0 and fund recovery

Eth 2.0



6

73

1d

last visit

Eth 2.0 Staking Returns

Eth 2.0



32

772

1d

What can we do to help Eth 1.x public understanding and development? 1

Community



15

202

2d

Web3 login plug-in for Discourse

EthHub



16

292

2d

What philosophical orientations have large representation in the community? 1

Governance



3

79

2d

Ideas for Evolving Ethereum -

Governance



11

98

2d

Signaling tools for the Ethereum governance processes

Governance



12

132

2d



all categories ▶

Latest

New (5)

Unread (23)

Top

Categories

+ New Topic

Topic		Replies	Views	Activity
Whisper-v2 : Request for requirements for ETH2 unified messaging protocol	 17	1.2k	1h	
Blockchain-based notarization platform on Ethereum Economics	 5	310	2h	
Pyromania from ETHParis: proof of burn cryptocurrency under the hood Economics	 2	324	14h	
Ethereum Governance Survey • Data Science	 0	38	16h	
Generalised Precompile for Elliptic Curve arithmetics and pairings Working Group • Miscellaneous	 0	71	20h	
Non-Custodial Sidechains •	 0	52	20h	
Benchmark: Circom vs Bellman (wasm) in Chrome on Mobile zk-s[nt]jarks	 7	505	1d	
Phase 2 pre-spec: cross-shard mechanics Sharding ■ cross-shard	 16	1.9k	1d	
Fast cross-shard transfers via optimistic receipt roots Sharding	 6	912	1d	
Fee Market Change Working Group formation (and my proposed amendment) • Economics	 3	111	1d	
Liveliness of Casper and Divergence Games Casper	 5	596	1d	



Ethereum Governance Survey

Since 2015, Ethereum has grown into a global phenomenon both in social engagement and technical dedication. Recently, Ethereum governance has come under greater scrutiny as the need for coordination between disparate stakeholders has become more necessary.

The Ethereum Governance Survey is intended to collect data from a diverse set of individuals within the Ethereum ecosystem, to better understand true sentiments across various groups and provide an anonymous outlet for communicating views.

The results of this survey will be published in a report that will hopefully inform future governance and decision making processes within the Ethereum ecosystem.

Your participation is appreciated.

This is NOT an official survey.

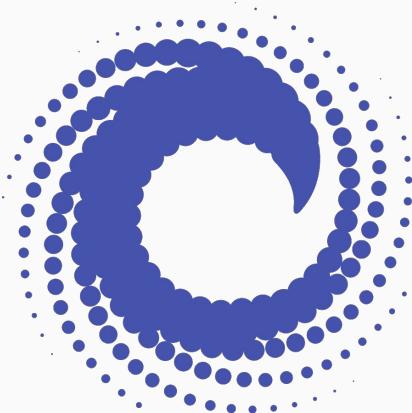
* Required

I. Demographics

1. On which continent do you reside or spend the most time in?
(no you don't live in Antarctica) *



ethereum
foundation



CONSENSYS



Source: <https://skydancingblog.com/2012/02/23/the-puppet-masters/puppet-masters/>

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Challenges & case studies

Challenges

- Due process, “decision finality”
- Legal liability, core dev concerns
- Social governance, Szabo’s Law, contentious topics
- Continuing to innovate, “move fast and break things”
- Coordinating work, lack of leaders
- Voter apathy, plutocracy
- Lack of formalized identity
- Source of legitimacy

Challenges, continued

- Trolling, bad behavior, openness vs. closed doors
- Lack of transparency and accountability, tyranny of structurelessness
- Diversity and inclusion
- Knowing the will of “the community,” technocracy, poor signalling tools
- Funding, economics, monetary policy

Case studies

- EIP-999, Parity multisig funds recovery
- EIP-1057, ProgPoW
- EIP-1234, Difficulty Bomb Delay and Block Reward Adjustment
- EIP-1283, Constantinople postponement
- EIP-1890, Commitment to sustainable ecosystem funding via block reward
- Afri's Polkadot tweet, tribalism vs. collaboration
- Eth1x

Parity multisig funds recovery

Legal liability, core dev concerns



pirapira commented on Feb 15, 2018

Member



...

A guardsman should not resign right after seeing something suspicious, but this is too much for me.

Reading legislation and performing something is already beyond my capacities. I didn't realize that the EIP editorship requires this ability. Now I suspect it does, and that's not what I can offer. Some EIP editors look nonchalant about legal consequences of this draft, but I have warned them, and I have no capacities to do anything more than warn them. After all, they might be right about it.

My blood pressure is higher since I found this draft. I don't sleep well. My family accuses me of mental absence. I believe these are signs that my abilities are not ready for the task of the EIP editorship. I resign from the post of an EIP editor.



Legal liability, core dev concerns



AlexeyAkhunov

Mar 26

My personal problem with being a decision maker in a contentious process is that I am a software developer, not a politician. And the difference is that politicians enjoy many more legal privileges that protect them, for example: https://en.wikipedia.org/wiki/Parliamentary_immunity 1
And this is exactly why certain pressure strategies can be used to easily remove dissenting voices from such public, yet legally unprotected decision bodies

EDIT:

To add to that, the only way to make an efficient governance system that can cope with contentious decisions, but operates in an extralegal space, is to use so-called the “veil of decentralisation”. And that means always put contentious decisions to the hands of the users of the networks, or the operators, who are not easy to identify and pressure

Eth1x

Social governance



Source: Lane Rettig

ProgPoW

Due process, “decision finality”



Evan Van Ness @evan_van_ness · Mar 22

I favored ProgPow until today's announcement that we decided months ago.

No longer. I vocally oppose ProgPoW unless there is transparency about how the decision is made.

Lack of formalized identity



((E. Glen Weyl))

@glenweyl

Follow



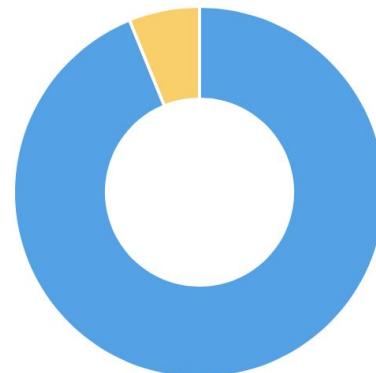
Just to be clear, I am still *extremely* critical of the current [@ethereum](#) technology...it formalizes property but not people and is therefore fundamentally antidemocratic and plutocratic. And I don't think the tech per se is transformative. But love the ideals and organization

1:34 AM - 5 Nov 2018

Voter apathy, plutocracy

No	0x90a3aa83b0da90abe2c33fadbe829cf74dfa59d9	191774.0694 ether
Yes	0x975f4ac23fcc9c39228cc20a2d4897c7b9bb39cc	2926304.4356 ether

Last Block: 7249664



NO

6.1504%

191774.0694 ether

YES

93.8496%

2926304.4356 ether

Do you think ProgPoW should be implemented? Please reply below to give additional details.

53% Yes

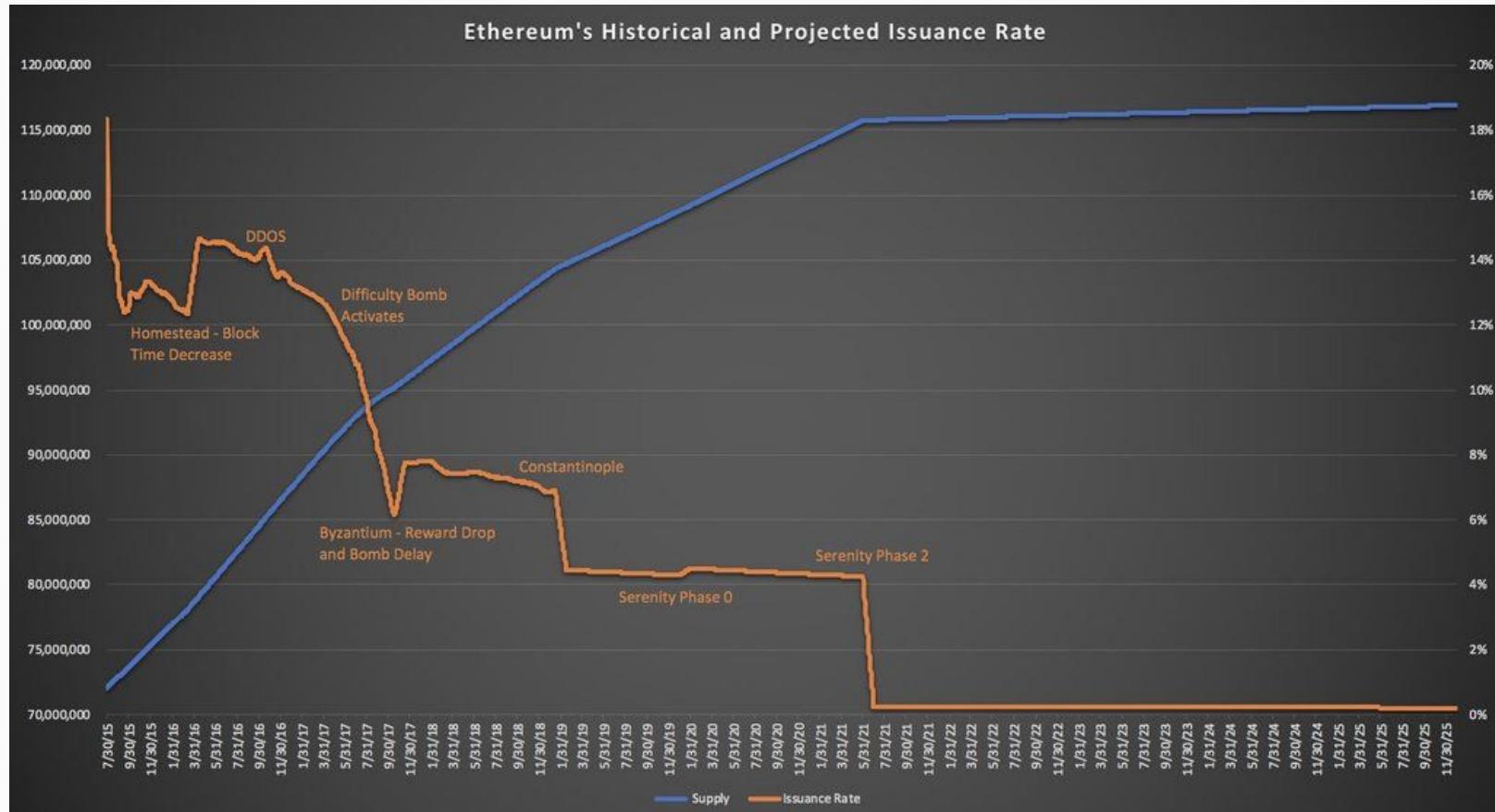
23% No

10% No opinion ⓘ

14% Diff ASIC resistant algo

1,516 votes • Final results

Economic governance



Source: Sam Cassatt, <https://twitter.com/samcassatt/status/1083414961488048133>

Constantinople postponement

Slowing pace of innovation

Immutables, invariants, and upgradability

EIPs



Irettig

1 Jan 16

One of the critical meta-questions raised by [Remediations for EIP-1283 reentrancy bug](#) and the [delay of the Constantinople upgrade](#) is: Precisely what on Ethereum is immutable and what behavior should be considered invariant?

Since irregular state transitions are outside the scope of this conversation, for sake of argument let's all agree that code and data (storage) are immutable.

However, we're left with the challenge that EVM semantics can and do change during a hard fork, the most germane example here being a change in gas cost. In other words, as a smart contract developer, **even though I know my code will not change, I do not have a guarantee that its behavior will not change.**

As [@AlexeyAkhunov](#) [points out](#) :

In all other hard forks, the gas cost of operations were only increased

Block
reward-based
ecosystem funding

Openness vs. closed doors

ethereum-funding / blockrewardsfunding

Unwatch 11 Unstar 16 Fork 2

Code Issues 52 Pull requests 0 Projects 1 Wiki Insights Settings

Filters is:issue is:open Labels 11 Milestones 0 New issue

	Author ▾	Labels ▾	Projects ▾	Milestones ▾	Assignee ▾	Sort ▾
<input type="checkbox"/> ⓘ 52 Open ✓ 6 Closed						
<input type="checkbox"/> ⓘ Exploring Legal Behind Using a Loan paid back with Block Rewards	#58 opened 7 days ago by glauseWilde					1
<input type="checkbox"/> ⓘ what if we create "altruistic staking pools"?	#56 opened 16 days ago by owocki					
<input type="checkbox"/> ⓘ should we add 'testnet block rewards funding' to the schedule?	#55 opened 16 days ago by owocki					2
<input type="checkbox"/> ⓘ A Proposal on How to Decide Membership of the multisig/metaDAO	#53 opened 18 days ago by glauseWilde					1
<input type="checkbox"/> ⓘ Exodus: put up or shut up on-chain protocol for legitimizing hark forks	#52 opened 19 days ago by lirazsiri					1
<input type="checkbox"/> ⓘ Investigate legal entity and legal protections in funding governance	Governance					
<input type="checkbox"/> ⓘ Put up or shut up performance-bond governance	#50 opened 21 days ago by lirazsiri					2
<input type="checkbox"/> ⓘ True minimum viable governance via EF	#48 opened 21 days ago by lirazsiri					6

Openness vs. closed doors



scott lewis 
@scott_lew_is

Follow



Hearing the Block Rewards Funding Group telegram, which was not allowing dissent, actually got so overrun by dissenters that the organizers had to abandon it.

Talk about an unpopular bailout. Wowzers.

3:32 PM - 21 Apr 2019

4 Retweets 8 Likes



3



4



8



Lane Rettig @lrettig · Apr 22



Replying to @scott_lew_is

To be clear I consider this in bad faith and unconstructive. A forum was established with a clear set of norms, and it was brigaded and those norms continually trampled on by a vocal few. The unfortunate consequence is that ongoing conversation is more likely to be invite-only.



2



2



5



Transparency and accountability

Minimum Viable EF Transparency

Funding



econoar ♦

1 🖊 9d

I want to start a discussion around what this community would find acceptable as far as Ethereum Foundation transparency goes. In my opinion it'd be best to start small and simple and build from there. General calls for transparency are not helpful and it'd be best to formulate specifics. On top of that, the reason why we think it's essential is important too. To me, it's mostly about understanding how much runway the EF has at given prices so that we can calculate how much grant funding they have for essential projects.

Last week I put out a [tweet](#) 2 with some basics I'd like to see. That includes:

- total headcount
- high level org structure or team breakdown
- avg salary by team or by role types
- expected yearly burn rate

I'm not sure if this is exactly what we need but I think it's in the ballpark. After the post, I created this [page](#) 4 on EthHub to gather any useful information we have so far.

I also found that the Aion Foundation [publishes](#) 4 something quarterly that could be a great guide.

Interested to hear thoughts!

5 ❤️



...

Reply

Tribalism and Afri's tweet

Trolling, bad behavior

Afri ♦
@5chdn

"Polkadot delivers what Serenity ought to be." Change my mind.
pic.twitter.com/6Az4wuYu8H

8:32 AM - 14 Feb 2019



The image shows a man with dark hair and a beard, wearing a blue long-sleeved shirt, sitting at a black desk outdoors. He is smiling and holding a small object in his hand. On the desk in front of him is a white banner with bold, black, sans-serif text. The text on the banner reads "POLKADOT" on the first line, "DELIVERS WHAT" on the second line, "SERENITY OUGHT TO BE" on the third line, and "CHANGE MY MIND" on the fourth line, which is preceded by a horizontal line. The background shows a brick-paved area, some greenery, and a building in the distance. The Twitter interface is visible around the image, including the user's profile picture, name, bio, and timestamp.

imgflip.com

Twitter

Trolling, bad behavior



Hudson Jameson

@hudsonjameson

Follow



I'm so angry and disappointed in the Ethereum community. You ran out one of our best contributors for the dumbest reasons. More people should have spoken up in support and there needs to be less vitriol.
twitter.com/5chdn/status/1 ...

This Tweet is unavailable.

2:58 PM - 17 Feb 2019

Misc

Tyranny of structurelessness



Source: Lane Rettig



Vlad Zamfir

@VladZamfir

Follow



What are the sources of legitimacy in Ethereum governance, from your perspective?

8:29 AM - 31 Mar 2019

Read a book?



Vlad Zamfir

@VladZamfir

Follow



Are successful revolutions legal?

Please provide a definition or theory of legality with your answers!

6:46 AM - 24 Apr 2019

11 Retweets 104 Likes



78

11

104



Outline

- Some history
- Ethereum governance today
- Challenges & case studies
- **Relevance to various fields**
- The road forward
- Working group findings
- Q&A

Relevance to various fields

Legal and Political Theory

- Sources of authority and legitimacy? No sovereign? Sovereign protocol?
- “Crypto law” vs. “Szabo’s law” vs. “the law”
- Social norms and practices vs. “the law”
- What is a fork? Are forks legal? Revolutionary?
- Trust: local and social? Transitivity? Scalable?
- Transfer of trust from people to procedures
- Property rights
- Forms and systems of government
- Blockchains as socio-politico-economic microcosmos

Identity and Sovereignty

- Sources of authority and legitimacy? No sovereign? Sovereign protocol?
- Lack of unique identity
- Local, social, subjective identity
- Self-sovereign identity
- Self-sovereignty vs. chain sovereignty vs. app sovereignty
- Role of identity and sovereignty in governance

Dispute Resolution

- On chain vs. off chain
- “Blockchain courts” a la Aragon, Kleros
- “Code is law” vs. “Crypto law” vs. “Szabo’s Law” vs. “The law”
- The cost of justice
- Sources of legitimacy and authority; “whose law?”
- How many people are hurt by our decisions?
- There is no such thing as no governance
- Mercy vs. judgement, can we represent mercy in code?

Representation and Liability

- Core developer concerns and liability
- Liability in case of breach of contract
- The DAO: Hard forks, irregular state transition, property law, social intervention
- Social contract vs. explicit contract vs. “code is law” vs. no contract
- Can representation be made in code?
- Is liability enforceable in code?

Legal Philosophy and Theory

- Source of legitimacy? No sovereign
- Or is the protocol the sovereign? By what legitimacy or authority?
- On-chain and off-chain governance in light of Schmitt and Kelsen's debate on sovereignty vs. legal positivism
- Do we have "crypto law"? Is it binding? How?
- Is "crypto law" distinct from "the law"? Is it subject to "the law"? Which jurisdiction? What about enforcement?
- Social norms and practices vs. "the law"
- Does morality have a role to play?
- Are forks legal? Revolutionary?

Political Philosophy and Social Theory

- Sources of authority and legitimacy
- Transfer of trust from people to procedures
- Property rights
- Forms and systems of government
- Blockchains as socio-politico-economic microcosmos
- Identity
- What is a fork?

International Law

- Sovereignty: self-sovereignty? Chain sovereignty? App sovereignty?
- Cross-chain commerce
- On/off ramps, meatspace anchors
- DAOs and “thin entities”
- Identity
- Governing “the commons”
- What is a fork?

Commons-based Governance (Ostrom 1990)

1. Clearly-defined group boundaries	
2. Adapt to local conditions	
3. Those affected can participate	
4. Effective monitoring, accountability	
5. Graduated sanctions for violations	
6. Cheap, easy conflict resolution	
7. Self-determination recognized by outside authorities	
8. Nested layers of responsibility and enterprise	

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The road forward

1. Be honest about the way
things work today:
technocracy, plutocracy, etc.

2. Articulate values,
principles, goals: do we need
a charter or constitution?
Values-based forks?

3. More explicit governance
and power structures to
battle the tyranny of
structurelessness

4. More local, autonomous,
permissionless organizing:
EthMagicians, Cat Herders

5. Mix centralized and decentralized solutions: the centralized supports, and is accountable to, the decentralized

6. Incremental decentralization, early wins

7. More learning from
research, experts, prior art,
off-chain systems

8. Don't hesitate to take good ideas from bad projects

9. Collect signals, run experiments, move fast and break things, fail fast

10. Diversity

Honorable mention: Year of the DAO

2019 is the Year of the DAO

The next-generation of decentralized governance



Eric Gorski [Follow](#)
Jan 28 · 4 min read

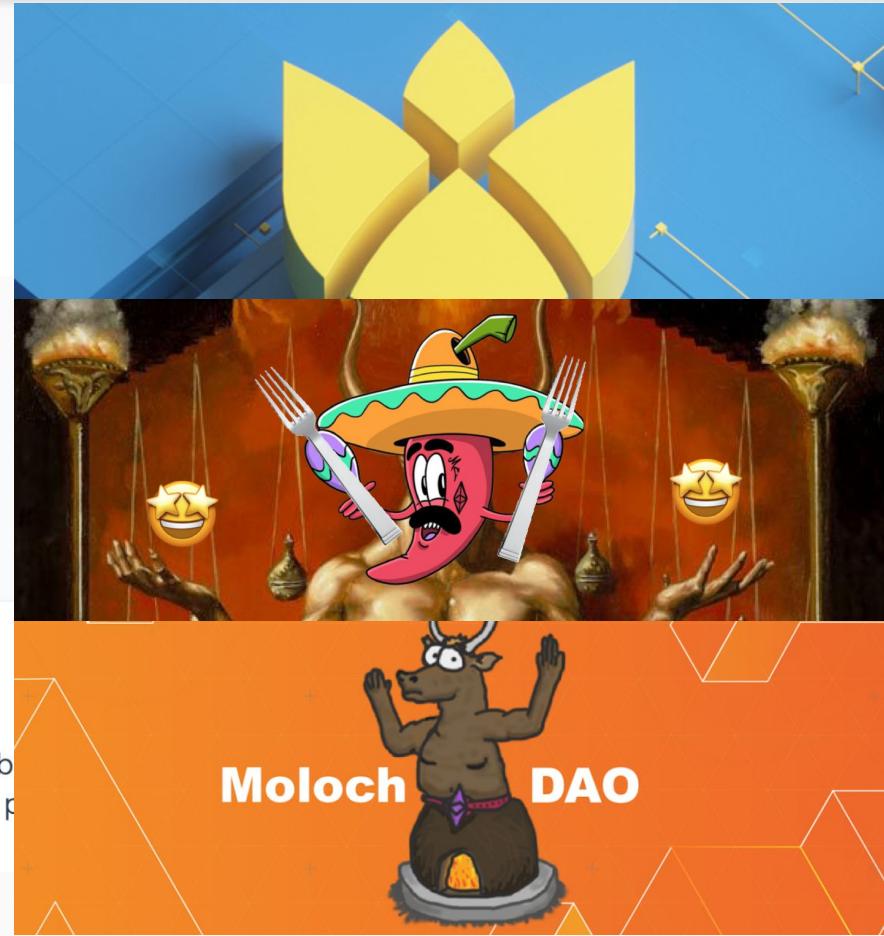
EthDAO: Making Ethereum great again

Community [ethereum](#)



luis CEO of Aragon One

At Aragon One, we care a great deal about our users. We care about most importantly, about the ones that we don't have yet. Those people could benefit from Aragon the most.



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Working group findings



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coala
COALITION OF AUTOMATED LEGAL APPLICATIONS

COALA working groups

Alegality

Exploring the challenges and opportunities faced by traditional organizations, institutions and jurisdictions as they interact with decentralized networks and autonomous blockchain-based

[LEARN MORE](#)

DAOs

Exploring ways in which blockchain technologies may provide an administrative and social layer for decentralized autonomous organizations and global communities.

[LEARN MORE](#)

Ethics

Exploring how – in the face of new technical architectures that enable new forms of social interaction and distribution of power – to build a culture of healthy social and ethical norms that foster individual responsibility and active participation.

[LEARN MORE](#)

Blockchain Governance

Identifying ways to govern blockchain-based applications, in order to ensure a proper distribution of powers on top of decentralized

[LEARN MORE](#)

Identity & Privacy

Investigating the critical intersection between blockchain technologies, privacy, data integrity, and security.

[EARN MORE](#)

Crypto-equity

Exploring the use and legality of blockchain technology as a novel way of issuing and coordinating the transfer of cryptographic tokens.

[LEARN MORE](#)

Smart Contracts

Exploring the interplay between law and technology in the context of smart contracts, automation and self-executing blockchain-based applications.

[LEARN MORE](#)

Regulation Technology

Investigating the role of blockchain technologies in existing policy frameworks, legal infrastructure and governance regimes.

[LEARN MORE](#)

Intellectual Property

Exploring ways in which blockchain technologies may support, complement, or supplement intellectual property.

[LEARN MORE](#)



Source: Lane Rettig

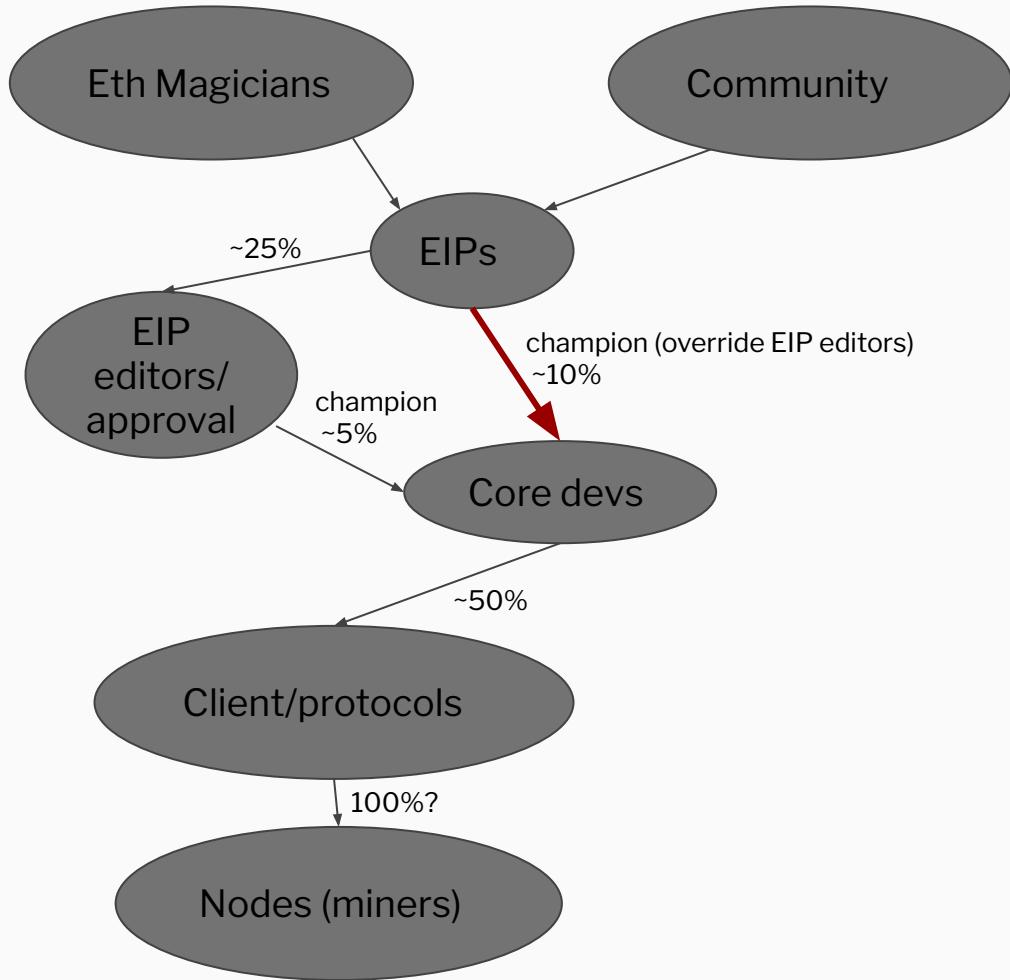
An important disclaimer

- This is a sneak peek! Full report forthcoming.
- These findings are a work in progress and will evolve.
- They come from a group of individuals, not COALA, not official.
- They are things that have worked elsewhere, and are not bespoke to Ethereum.
- Unclear who has the authority to institute them, if anyone.
- Caveat emptor!

Ethereum Stakeholder mapping

Who are the stakeholders →	EF	ConsenSys	Par/W3	Infra	Core Devs	Magicians	App Devs	Miners	Investors (ETH, Funds)	“Community”, users, businesses, oligarchs, cat-herders, DAOs, DEXes
What is governed ↓										
Protocol	Brand/ resources	Resources			✓✓✓	✓✓✓		✓✓		
Network (hardware)				✓✓			✓	✓✓		
Human Resources	✓✓✓	✓✓✓ ✓✓✓	✓✓		✓				✓	
“EF” “non-profit steward”	✓✓✓					✓				✓✓✓✓✓✓✓
Resources	✓✓✓	✓✓✓	✓	✓						
Clients		✓	✓		✓✓✓	✓✓				
Apps	✓	✓✓✓					✓✓✓		✓✓	✓✓✓

Ethereum's Formal Governance: EIP process

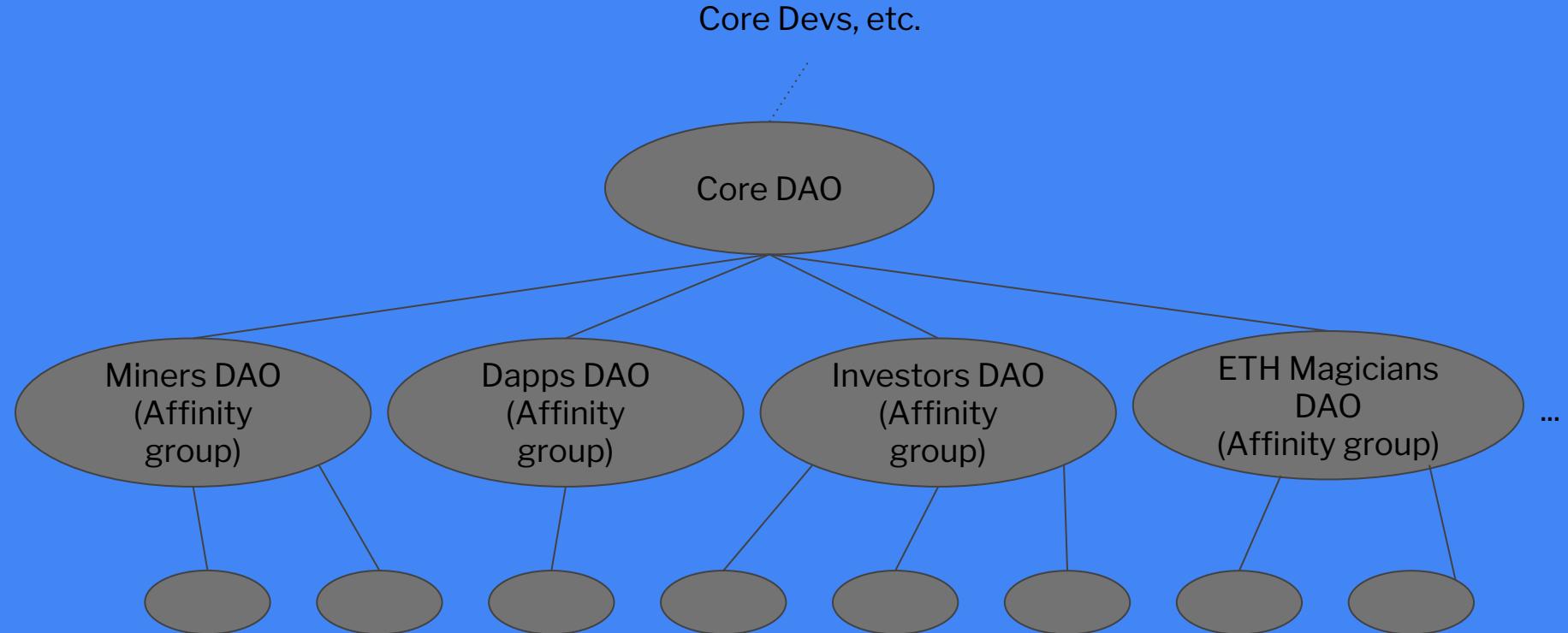


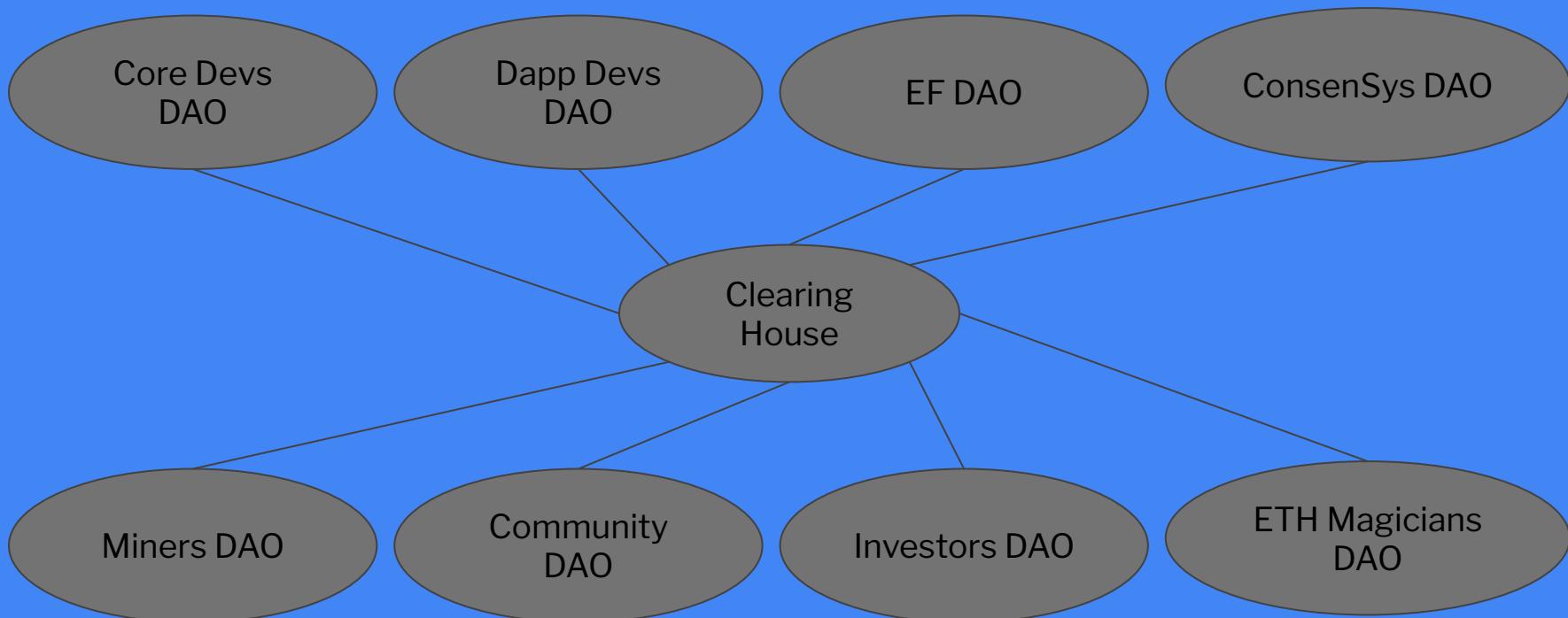
Pain points (for core devs)

- Resource allocation
- Lack of decision finality, delay, uncertainty
- Lack of direction and leadership
- Poor pay, overworked, underpaid, underappreciated
- Under attack from community both when working *privately or publicly*
- Hate to do management, budgeting etc. Empower them to write code!
- Hard to quantify costs, taboo about talking about being paid (sense of mission)

Why more explicit governance is needed

- Preventing the arbitrary exercise of power
- Overcoming the Tyranny of Structurelessness
- Decision finality
- Overcoming the Tragedy of the Commons
- Preventing oligarchy/plutocracy
- Addressing major pain points (e.g., liability)





COALA Report on Ethereum Governance

We will produce a report by June for consideration by the community, including but not limited to:

- State of Ethereum governance and existing processes
- The critical risks facing Ethereum stakeholders and what should change
- Clear set of recommendations based on literature and practice
- 2-3 proposals for experimental governance councils

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Q&A

Thanks!

Lane Rettig // @lrettig