hiya! in response to this tweet, i wrote down a non-exhaustive list of resources for cross-domain MEV & aggregated previous internal lists i created. welcome additional contributions <3

#### Essential

- [2112.01472] Unity is Strength: A Formalization of Cross-Domain Maximal Extractable Value
- Flashbots Research Workshop #7: Cross-domain MEV AMA YouTubesubsequent workshop on the paper
- Flashbots Research Workshop #7: Cross-domain MEV AMA YouTubesubsequent workshop on the paper
- The multichain world is centralized studying cross-domain MEV Alex Obadia (Flashbots) YouTuk
- Endgame by @vbuterin
- https://westerngate.xyz by @sam & team
- Pay To Win: Cheap, Crowdfundable, Cross-chain Algorithmic Incentive Manipulation Attacks on PoW Cryptocurrencies

#### Cosmos

- https://gateway.pinata.cloud/ipfs/QmWXkzM74FCiERdZ1WrU33cqdStUK9dz1A8oEvYcnBAHeo Cosmos Atom 2.0 paper (see Interchain Scheduler)
- whitepaper/whitepaper.pdf at main · anoma/whitepaper · GitHubAnoma whitepaper
- Heterogeneous Paxos and Multi-Chain Atomic Commits by Isaac Sheff (Anoma)
- OPODIS 2020 Heterogeneous Paxos YouTube
- Zenith Documentation Mekatek's Zenith

#### Ethereum L2s:

- SoK: Validating Bridges as a Scaling Solution for Blockchains
- MEVA 2 years in Ben Jones (Optimism) YouTube
- L2 sequencing and MEV Ed Felten (Arbitrum) YouTube
- MEV.Day MEV-aware design space for L2s and bridges panel YouTube

## On oracles & cross-chain communication:

- SoK: Communication Across Distributed Ledgers, paper, video
- The tradeoffs of cross-chain communication related article by Lakshman Sankar
- The tradeoffs of cross-chain communication related article by Lakshman Sankar
- Augur v2 whitepaper for oracles
- Overcommitted: MEV in message passing James Prestwich (Nomad) YouTube
- Article on Nil foundation work building a trustless state verification across Ethereum-Solana, <u>https://blog.nil.foundation/2021/10/14/solana-ethereum-bridge.html</u>
- · they have a few articles on building this bridge and the Mina-Ethereum bridge, very good
- they have a few articles on building this bridge and the Mina-Ethereum bridge, very good
- Optimizing cross-chain swaps Layer 2 Ethereum Research
- HTLCs Considered Harmful SBC '19 YouTube, a talk by Dan Robinson on hash-time locked contracts and their downfalls
- Outlining a standard interface for cross-domain ERC20 Transfers EIPs Fellowship of Ethereum Magicians
- Defining L2 Interoperability: A First Attempt Layer 2 Ethereum Research

# On bridges:

• James Prestwich: Building Bridges, Not Walled Gardens - YouTubeby James Prestwich

- Clusters: how trusted & trust-minimized bridges shape the multi-chain landscapeby Mustafa Al Bassam
- MEV at the liquidity layer of bridges Arjun Bhuptani (Connext) YouTube
- Other projects' designs to check out although you'll find they're all just different designs on the cross-ledger communication tradeoff
- https://hop.exchange/whitepaper.pdf Hop bridge whitepaper
- Chris Whinfrey: Layer-2 Composability and Communication YouTube
- · Chris Whinfrey: Layer-2 Composability and Communication YouTube
- https://layerzero.network/pdf/LayerZero\_Whitepaper\_Release.pdf LayerZero\_whitepaper
- Delta-Solving.The.Bridging-Trilemma (3).pdf
- Delta-Solving.The.Bridging-Trilemma (3).pdf
- Introducing the Cross-Chain Interoperability Protocol (CCIP)
- End-to-End Workflow Celer Inter-chain Message (IM)
- https://wiki.polkadot.network/docs/learn-crosschain
- XCM: The Cross-Consensus Message Format | by Gavin Wood | Polkadot Network | Medium
- whitepaper/whitepaper.pdf at main · anoma/whitepaper · GitHub
- <a href="https://youtube.com/channel/UCfhR0KvmbV0yEkxgKnVvUDg">https://youtube.com/channel/UCfhR0KvmbV0yEkxgKnVvUDg</a>, Burning Bridges podcast by Arjun from Connext
- <a href="https://hop.exchange/whitepaper.pdf">https://hop.exchange/whitepaper.pdf</a>
  Hop bridge whitepaper.
- Chris Whinfrey: Layer-2 Composability and Communication YouTube
- Chris Whinfrey: Layer-2 Composability and Communication YouTube
- https://layerzero.network/pdf/LayerZero\_Whitepaper\_Release.pdf LayerZero whitepaper
- Delta-Solving.The.Bridging-Trilemma (3).pdf
- Delta-Solving.The.Bridging-Trilemma (3).pdf
- Introducing the Cross-Chain Interoperability Protocol (CCIP)
- End-to-End Workflow Celer Inter-chain Message (IM)
- https://wiki.polkadot.network/docs/learn-crosschain
- XCM: The Cross-Consensus Message Format | by Gavin Wood | Polkadot Network | Medium
- whitepaper/whitepaper.pdf at main · anoma/whitepaper · GitHub
- https://youtube.com/channel/UCfhR0KvmbV0yEkxgKnVvUDg ,Burning Bridges podcast by Arjun from Connext

### Misc

- dAMM, an L2-Powered AMM. A DeFi-friendly L2 AMM | by StarkWare | StarkWare | Medium
- Cross-rollup DEX with smart contracts only on the destination side Layer 2 Ethereum Researchy Vitalik
- Cross-shard DeFi composability Sharded Execution Ethereum ResearchOct '19:')
- <a href="https://twitter.com/VitalikButerin/status/1479501366192132099?t=q65E4hRZ2HmG0yySUF4AaQ&s=19">https://twitter.com/VitalikButerin/status/1479501366192132099?t=q65E4hRZ2HmG0yySUF4AaQ&s=19</a>

## Vitalik on multi-chain/cross-chain

- https://www.binance.org/en/blog/bsc-2022-build-and-build/ Binance L2s yay
- Multi-chain strategy Protocol Development Compound Community Forum
- many of the resources in here: <a href="https://github.com/flashbots/mev-research/blob/main/FRPs/completed/FRP-16.md">https://github.com/flashbots/mev-research/blob/main/FRPs/completed/FRP-16.md</a>...

threads in this forum:

| We're going to estimate a lower bound of cross-domain MEV |  |
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