is a weekly collection of papers, articles and resources related to MEV. The intention of this letter is to provide a comprehensive summary of the latest research, discussions, and developments in the space, with links for further reading.

# **Papers & Articles**

- <u>Searcher Competition in Block Building</u> by <u>Akaki Mamageishvili, Christoph Schlegel, Benny Sudakov</u>, and <u>Danning Sui</u> study the amount of MEV captured by validators as a function of searcher competition in blockchains with competitive block-building markets, such as Ethereum.
- · Forum post by Akaki Mamageishvili
- Thread by Akaki Mamageishvili
- · Forum post by Akaki Mamageishvili
- Thread by Akaki Mamageishvili
- Flashbots report: System requirements, existing and new solutions, and their efficiency.by Orestis Alpos, Bernardo
   David, Nikolas Kamarinakis and Dionysis Zindros reviews the limitations of existing consensus and consensus-less
   protocols and presents new constructions to improve censorship-resistance and efficiency.
- Forum post by Orestis Alpos
- · Forum post by Orestis Alpos
- <u>Introducing Gas Fee Refunds on Flashbots Protect and builder</u> by <u>@Fred</u> announces that <u>Gas Fee Refunds</u> is live for all transactions sent through Flashbots Protect and Flashbots builder, with an <u>open source</u> refund rule executed securely in TEEs.
- Thread by @shea
- Thread by @shea
- Account Abstraction Leveraging TEE by Marcos Carlomagno outlines an MVP for implementing account abstraction
  using email and password credentials via SUAVE.
- <u>EVIntent Darkmatter in MEV</u> by <u>PropellerHeads</u> details how searchers can extract MEV from intents, and possible ways to mitigate these risks.
- Thread by PropellerHeads
- Thread by PropellerHeads
- Publicly Broadcasting Min-Bid by Julian Ma examines how the min-bid

parameter in MEV-Boost affects block building and suggests that making the parameter public could enhance both revenue and efficiency. \* Thread by Julian Ma

- Thread by Julian Ma
- Supplementing Censorship Resistance Today by Data Always analyzes the strengths and weaknesses of min-bid

#### and localBlockValueBoost

to improve censorship resistance.

- <u>Sealed execution auction</u> by <u>Anders Elowsson</u> outlines a mechanism that uses a Vickrey slot auction in two rounds to select the next execution proposer.
- Thread by Anders Elowsson
- Thread by Anders Elowsson
- <u>Unbundling the Current State of Proposer-Builder Separation</u>by <u>Teck Yuan Lee</u> describes how approximately 90% of Ethereum blocks are built by 4 builders and the implications on censorship resistance and network security.
- <u>Staking Rights Auctions</u> by <u>Pedro Argento</u> details a mechanism aimed to limit issuance, allow proposers to express economic preferences, and achieve targeted participation rates.

- <u>mev-commit release!</u> by <u>Primev</u> announces the release of <u>mev-commit</u>, enabling actors in the MEV supply chain to issue real-time credible commitments, such as preconfirmations.
- Introducing 0x's next-gen pricing engine presents 0x v2 as their new pricing engine with improved routing, better trade
  execution, and new monetization controls.
- Thread by 0x
- · Thread by Matcha
- Thread by 0x
- · Thread by Matcha
- Express Relay: Priority Auctions for Efficient DeFi Markets by Pyth Network introduces Express Relay as a way for searchers to bid on lucrative operations, like liquidations, directly with DeFi protocols.
- Thread by Pyth Network
- Thread by Pyth Network
- The First Beta Release of the Shutterized Gnosis Chain Is Now Live!by Shutter announces that their threshold encrypted mempool is live on Gnosis Chain.
- Thread by Shutter
- Thread by Shutter
- Staking: Risks & Rewards by Christine Kim provides an overview of risks, rewards, and future trends related to staking on Ethereum.
- Thread by Christine Kim
- Thread by Christine Kim

## **Posts & Threads**

- Justin Drake published a post to announce that based preconfirmations are live on the Helder testnet.
- <u>Terence Tsao</u> published a <u>thread</u> that explores <u>Ed Felten</u>'s presentation at <u>Sequencing x CAKE day</u> on <u>Timeboost</u> and decentralized sequencing.
- Four Pillars published a post describing how the capture of OEV through Oval is transforming the way dapps are able to generate revenue.

## **Talks & Discussions**

- EthCC by Ethereum France:
- Decentralized Block Building by @shea
- <u>Mitigating MEV with FHE Blind Arbitrage on Ethereumby @jonathan</u>
- Ethereum: Reducing Trust Between Proposers and Builders by Terence Tsao
- Splitting the block by Philipp Zahn and Daniele Palombi
- Don't let your friends do MEV by Marius van der Wijden
- Cashing in on MEV: the secret edge of oracle-based AMMsby Shigami
- The cost of artificial latency in PBS contextby Michael Moser
- Execution auctions by Justin Drake
- Cross roll-up arbitrage and impact of Decun on swap feesby Krzysztof Gogol
- MEV capturing AMM, from theory (FM-AMM) to practice (CoWAMM) by Andrea Canidio
- Is Ethereum's Issuance Policy Sustainable? by Caspar Schwarz-Schilling and Ansgar Dietrichs

- What's the issue with issuance? by Caspar Schwarz-Schilling, Ansgar Dietrichs and Christine Kim
- The Espresso Shared Sequencing Marketplace by Benedikt Bünz
- Aggregation + sequencer marketplace = L2 interoperability by Ben Fisch
- Anoma: Ethereum's Intent Machine by Adrian Brink
- The ARM: bringing intents to Ethereum by Yulia Khalniyazova
- How to decentralize Intents by Mounir Benchemled
- Solving Interoperability with Intents by Hart Lambur
- Bridges are Shared Sequencers by Nicholas Pai
- How to price your Preconfirmation by Murat Akdeniz
- The Sequencer of Tomorrow by Jan Gorzny
- Developing Secure Multi-Provers with SGX by Porter Adams
- Decentralized Block Building by @shea
- Mitigating MEV with FHE Blind Arbitrage on Ethereumby @jonathan
- Ethereum: Reducing Trust Between Proposers and Builders by Terence Tsao
- Splitting the block by Philipp Zahn and Daniele Palombi
- Don't let your friends do MEV by Marius van der Wijden
- Cashing in on MEV: the secret edge of oracle-based AMMs by Shigami
- The cost of artificial latency in PBS context by Michael Moser
- Execution auctions by Justin Drake
- Cross roll-up arbitrage and impact of Decun on swap feesby Krzysztof Gogol
- MEV capturing AMM, from theory (FM-AMM) to practice (CoWAMM) by Andrea Canidio
- Is Ethereum's Issuance Policy Sustainable? by Caspar Schwarz-Schilling and Ansgar Dietrichs
- What's the issue with issuance? by Caspar Schwarz-Schilling, Ansgar Dietrichs and Christine Kim
- The Espresso Shared Sequencing Marketplace by Benedikt Bünz
- Aggregation + sequencer marketplace = L2 interoperability by Ben Fisch
- Anoma: Ethereum's Intent Machine by Adrian Brink
- The ARM: bringing intents to Ethereum by Yulia Khalniyazova
- How to decentralize Intents by Mounir Benchemled
- Solving Interoperability with Intents by Hart Lambur
- Bridges are Shared Sequencers by Nicholas Pai
- How to price your Preconfirmation by Murat Akdeniz
- The Sequencer of Tomorrow by Jan Gorzny
- Developing Secure Multi-Provers with SGX by Porter Adams
- Modular Summit 3.0 by Celestia Labs and Maven11
- Day 1:
- <u>Livestream recording</u> (Chisel stage) curated by <u>L2BEAT</u> explored data availability, execution environments, and applications in the modular ecosystem.
- Livestream recording (Canvas stage)

- <u>Livestream recording</u> (Chisel stage) curated by <u>L2BEAT</u> explored data availability, execution environments, and applications in the modular ecosystem.
- Livestream recording (Canvas stage)
- Day 2:
- <u>Livestream recording</u> (Chisel stage): <u>Metagame.day</u> curated by <u>Flashbots</u> with talks on application design, protocol research, MEV, TEEs, and more.
- Agenda with slides by @Tina
- Agenda with slides by @Tina
- Livestream recording (Canvas stage)
- <u>Livestream recording</u> (Chisel stage): <u>Metagame.day</u> curated by <u>Flashbots</u> with talks on application design, protocol research, MEV, TEEs, and more.
- Agenda with slides by @Tina
- Agenda with slides by @Tina
- <u>Livestream recording</u> (Canvas stage)
- Day 3:
- Livestream recording (Chisel stage) curated by Blockworks and ZKV with a focus on modular expansion.
- Livestream recording (Canvas stage)
- <u>Livestream recording</u> (Chisel stage) curated by <u>Blockworks</u> and <u>ZKV</u> with a focus on modular expansion.
- Livestream recording (Canvas stage)
- Day 1:
- <u>Livestream recording</u> (Chisel stage) curated by <u>L2BEAT</u> explored data availability, execution environments, and applications in the modular ecosystem.
- Livestream recording (Canvas stage)
- <u>Livestream recording</u> (Chisel stage) curated by <u>L2BEAT</u> explored data availability, execution environments, and applications in the modular ecosystem.
- <u>Livestream recording</u> (Canvas stage)
- Day 2:
- <u>Livestream recording</u> (Chisel stage): <u>Metagame.day</u> curated by <u>Flashbots</u> with talks on application design, protocol research, MEV, TEEs, and more.
- Agenda with slides by @Tina
- Agenda with slides by @Tina
- <u>Livestream recording</u> (Canvas stage)
- <u>Livestream recording</u> (Chisel stage): <u>Metagame.day</u> curated by <u>Flashbots</u> with talks on application design, protocol research, MEV, TEEs, and more.
- Agenda with slides by @Tina
- Agenda with slides by @Tina
- Livestream recording (Canvas stage)
- Day 3:
- <u>Livestream recording</u> (Chisel stage) curated by <u>Blockworks</u> and <u>ZKV</u> with a focus on modular expansion.
- <u>Livestream recording</u> (Canvas stage)
- Livestream recording (Chisel stage) curated by Blockworks and ZKV with a focus on modular expansion.

- Livestream recording (Canvas stage)
- Recordings from Intents Discussions by Anoma have been uploaded with discussions on topics related to intents and solvers.
- The Defiant: Now You See Me, Now You Don't: Onchain Privacyinvites Andrew Miller, Joe Andrews, and Harjasleen Malvai for a discussion related to on-chain privacy, ZK, and TEEs.

## Other

- <u>EIP-7727</u>: <u>EVM Transaction Bundles</u> by <u>Lily</u> presents a design to enable meta transactions to order other transactions without revert protections.
- <u>Blockspace and Execution Commitments Aggregated Links</u> by <u>Ryan Chern</u> is a collection of resources related to blockspace and execution commitments.
- <u>Distributed</u>, <u>persistent storage for suave apps</u> by <u>@mateusz</u> seeks input on solutions for medium-volume distributed and persistent storage.

# **Upcoming events**

• July 24-30

: EDCON 2024 by De University of Ethereum

• July 28:

Tané Summit #1 by Tané

Aug 6

: The MEV Workshop at the Science of Blockchain Conference 2024 (MEV SBC '24)by Flashbots

• Aug 7-9

: The Science of Blockchain Conference 2024 (SBC'24) by IC3, Stanford Center for Blockchain Research and UC Berkeley RDI.

• Aug 16-17

: Frontiers by Paradigm \* Thread by Georgios Konstantopoulos

Agenda by [Georgios Konstantopoulos

](https://x.com/gakonst)

- Thread by Georgios Konstantopoulos
- Agenda by [Georgios Konstantopoulos

](https://x.com/gakonst)

[Sign up here

](https://flashbots.net/the-mev-letter) if you'd like to get The MEV Letter straight to your inbox!

[Previous editions of The MEV Letter

](https://collective.flashbots.net/tag/the-mev-letter)[Join Flashbots

](https://www.flashbots.net/jobs)