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**

- Inelastic vs. Elastic Supply: Why Proof of Stake Could Be Less Centralizing Than Execution Tickets @Christoph explores how a variable supply of execution rights could prevent proposer monopolization.
- Thread by @Quintus
- Post by Jonah Burian
- Thread by @Quintus
- Post by Jonah Burian
- Exploring Verifiable Continuous Sequencing with Delay Functions by Lorenzo presents a rotating leader mechanism to enforce the timeliness, safety, and non-extractive ordering of sequencers.
- The Hand-off Problem by init4 examines the limitations of forced inclusion to prevent censorship on L2s.
- Thread by init4
- Post by Wei Dai
- Thread by init4
- Post by Wei Dai
- <u>Timestamp Ordering in MCP for Timing Games</u> by <u>Oriol Saguillo</u> describes how ordering transactions based on their timestamps can mitigate frontrunning in MCP.
- Embedded fee markets and ERC-4337 (part 2) by Davide Rezzoli and Barnabé Monnot discusses ERC-4337's fee structure for bundlers, the impact on L2s, and methods for improving efficiency through signature aggregation.
- <u>Understanding "An Analysis of Intent-Based Markets"</u> by <u>Emperor</u> examines intent-based markets and the emergence of solver oligopolies.
- Optimization Problem: Block Proposal in ePBS Block Auction by Terence Tsao discusses the optimization problem of reducing latency in ePBS block auctions.
- Thoughts on Order Flow by Antony Denyer highlights how the majority of builder revenue comes from exclusive access to private order flow, not public transactions.
- An introduction to oracle extractable value (OEV) by Chorus One and Superscrypt outlines the concept of OEV and describes how Oval, OEV Network, and Warlock are designed to capture OEV.
- Thread by Chorus One
- Thread by Chorus One
- Searcher-Builder Integration Revealed: Builder "I can haz block?", a.k.a. Frontrunner Yoink, snagged \$3.8M Miner Tips in August by EigenPhi explores the profitable strategies used by the searcher-builder "I can haz block?".

## **Posts & Threads**

- @sui414 published a thread analyzing the market dynamics of UniswapX and compares them to DEX aggregators and other RFQ systems.
- · Reply by Xin Wan
- · Reply by Xin Wan
- <u>Jonah Burian</u> published a <u>thread</u> highlighting concerns related to Multiblock MEV and the risk of centralization if it becomes more widely exploited.
- Alex Nezlobin published a post questioning whether sandwich attacks where the arbitrageur doesn't profit at the user's
  expense could be considered morally benign.

- · Reply by Phil Daian
- · Reply by Phil Daian
- Andy published a post exploring how chain abstraction can unify modular blockchains and improve user experience.
- <u>Toni Wahrstätter</u> published a <u>post</u> to highlight that <u>beaverbuild</u> and <u>Titan Builder</u> submit about 1000 bids per slot, while smaller builders typically submit less than 100.
- Renegade published a thread to announce that their on-chain dark pool is live on Arbitrum One.
- Thread by Chris Bender
- Thread by Chris Bender

## **Talks & Discussions**

- <u>Bankless</u>: <u>The MEV Trilemma</u> invites <u>@shea</u> to discuss how the MEV landscape is set to evolve with TEEs enabling decentralized auctions that maintain privacy and integrity without a trusted third party.
- Post by Bankless
- · Post by Bankless
- <u>Flashwares VII: Reusable Enclaves</u> invites <u>Shixuan Zhao</u> to present their work on <u>Reusable Enclaves for Confidential Serverless Computing</u>.
- Forum post by @mateusz
- Forum post by @mateusz
- Bankless: Is the Ethereum Roadmap Off Track?invites Max Resnick for a conversation on the state of Ethereum's
  rollup-centric roadmap and why scaling the L1 should be prioritized.
- Post by Justin Drake
- Reply by Max Resnick
- Reply by @bert
- Reply by Max Resnick
- Reply by @bert
- Post by Bankless
- Post by BREAD
- Post by Justin Drake
- Reply by Max Resnick
- Reply by @bert
- Reply by Max Resnick
- Reply by @bert
- Post by Bankless
- Post by BREAD
- Expansion: Are L1s and L2s Converging? Eclipse & Astria on Crypto's Scaling Future invites taetaehoho and Josh
  Bowen to discuss L2 scaling, shared sequencers, DA, MEV, Eclipse, and Astria.
- Post by Expansion
- Post by Expansion
- OxResearch: Intents Trading: Why AMMs Are Going Out of Style invites Joshua and Roee to discuss DEX design, intents, solvers, and Aori.

- More slides on Ethereum block-space markets by Mike Neuder provide an overview of the blockspace market design space, including PTC, EA, FOCIL, and Mechan-stein.
- Thread by Dom
- Thread by Dom
- <u>CBER Forum</u>: <u>Ethereum Mechanism Design</u>: <u>MEV, MEV Burn, Execution Auctions etc...</u>by <u>Mike Neuder</u> outlines validator rewards and the research focused on separating issuance from MEV.
- Post by Mike Neuder
- Post by Mike Neuder
- I Pledge Allegiance: Kubi Mensah Gattaca and the MEV Supply Chaininvites Kubi Mensah to discuss the rise of Titan builder, the current state of the MEV landscape, and private orderflow.
- <u>ePBS (EIP-7732)</u> <u>breakout room #8</u> hosted by <u>Terence Tsao</u> summarizes the latest research, client updates, and testing of <u>EIP-7732</u>.
- · Agenda by Potuz
- Notes by Terence Tsao
- Agenda by Potuz
- Notes by <u>Terence Tsao</u>
- <u>PEEPanEIP#136: EIP-7732: Enshrined Proposer-Builder Separation invites Potuz</u> and <u>Terence Tsao</u> to detail <u>EIP-7732</u> within the context of consensus specs and client implementations.
- Thread by Pooja Ranjan
- Slides by <u>Terence Tsao</u>
- Thread by Pooja Ranjan
- Slides by Terence Tsao
- The Rollup: Are Based Rollups The Solution To Ethereum's Long-Term Value Capture? Invites Brecht Devos and Ceciliaz for a conversation on based rollups, sequencing, and Taiko Gwyneth.
- Thread by Ceciliaz
- Post by The Rollup
- Thread by Ceciliaz
- Post by The Rollup

## Other

- <u>Intel SGX Key Disclosure Claim</u> by <u>Intel</u> provides an official statement regarding the <u>vulnerable</u> SGX Root Provisioning Key disclosed by <u>Mark Ermolov</u>.
- <u>Sandwich-Mitigating Uniswap V2</u> by <u>diego</u> is a modification of Uniswap V2 which enforces the <u>Greedy Sequencing Rule</u> in order to make sandwich attacks unprofitable while preserving atomic composability.
- Thread by diego
- Thread by diego
- [AMA] We are EF Research (Pt. 12: 05 September, 2024by the Ethereum Foundation's Research teams answer questions related to current and future Ethereum research.

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