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.

In order to ensure The MEV Letter meets its objectives and provides an optimal reading experience, we've set up a [survey

](https://3eoyy3ayc8w.typeform.com/to/KrtWUvSV) to better understand reader preferences and expectations.

We do not include any trackers in the emails, which means that we can not perform direct analytics on reader behavior. Instead, we rely on your feedback to optimize content and improve the publication further. The [survey

[(https://3eoyy3ayc8w.typeform.com/to/KrtWUvSV) is quick and your engagement is very much appreciated. Thank you!

# **Papers & Articles**

• <u>Transaction Fee Mechanism Design in a Post-MEV World</u> by <u>Maryam Bahrani, Pranav Garimidi</u> and <u>Tim Roughgarden</u> show that TFM design is fundamentally more difficult with active

block producers than with passive ones, and that no TFM can simultaneously be incentive compatibility for both users and active

block proposers.

- <u>Publishing Flashbots Protect and MEV-share Data</u> by <u>Danning Sui</u> announces the release of historical transaction data for Flashbots Protect and MEV-Share through <u>Flashbots Data</u>, <u>Flipside Crypto</u>, and <u>Dune Analytics</u>.
- Thread by <u>Danning Sui</u>
- Thread by Danning Sui
- Frequent Batch Auction on SUAVE by Alphaist discusses the limitations of current DEX designs and explores how a
  frequent batch auction on SUAVE could improve trade execution, reduce centralization, and mitigate MEV.
- Composable block building Mev-Compose by Jinsuk presents a design for composable block building on SUAVE using meta-bundles that aggregate bids from builders and searchers.
- Concurrent Block Proposers in Ethereum by Mike Neuder and Max Resnick explores the potential benefits to censorship resistance by having multiple

block proposers per slot. \*Thread by Max Resnick

- Thread by Max Resnick
- <u>ePBS design constraints</u> by <u>Potuz</u> identifies a set of features essential for ePBS and explores additional design considerations.
- Thread by Potuz
- Thread by Potuz
- <u>Payload boosts in ePBS</u> by <u>Potuz</u> looks at how certain forms of ePBS can prevent reorgs in the presence of colluding proposers, attesters and builders.
- Thread by Potuz
- Thread by Potuz
- Why You Should Care About ePBS? by <u>Terence Tsao</u> discusses the trust dependencies between builders, relays and proposers in MEV-Boost, and analyzes the implications of enshrining PBS.
- <u>Latency is Money: Timing Games /acc</u> by <u>Data Always</u> visualize the impact of timing games on network stability and explore how MEV-Burn could incentivize more aggressive timing games.
- Reply by caspar
- · Reply by caspar
- <u>Censorship, Latency, and Preconfirmations in the Blob Market</u>by <u>Primev</u> dives into the emerging EIP-4844 blob market and explores the potential impact it may have on block building and network latency.

- Thread by Primev
- Thread by Primey
- In support of simple inclusion lists by Marius van der Wijden presents concerns related to the proposed inclusion list designs and proposes an alternative design via optional

#### inclusion lists.

- Inclusion List (EIP-7547) End to End Workflowby Terence Tsao details a version of the inclusion list where the current slot inclusion list summary is committed within a block.
- MEV-Boost Withdrawal bug by <u>Umberto Natale</u> details an issue with how MEV-Boost relays accounts for consensuslayer withdrawals when determining the highest bid.
- Post by Chorus One
- Post by Chorus One
- <u>Distortion of MEV Auctions by Withdrawals</u> by <u>Data Always</u> details how the winning bid in MEV-Boost can be inflated by consensus-layer withdrawals.
- Thread by Data Always
- Thread by Data Always
- Endgame Staking Economics: A Case for Targeting by Ansgar Dietrichs and caspar discuss the negative externalities related to Ethereum's current issuance policy and propose an update for Electra.
- Post on Ethereum Magicians by Ansgar Dietrichs and caspar
- Thread by caspar
- Post on Ethereum Magicians by Ansgar Dietrichs and caspar
- Thread by caspar
- <u>CAKE Working Group</u> by <u>Frontier Research</u> introduces a working group to develop standards for message-passing between layers in the chain abstraction-stack.
- Thread by Frontier Research
- Thread by Stephane Gosselin
- Thread by Frontier Research
- Thread by Stephane Gosselin
- <u>Block Builder Profitability | December 2023 January 2024</u> by <u>OreoMev</u> analyzes the block building market and builders increased profitability in recent months.
- <u>Launching mev.fyi</u>, the <u>MEV research chatbot</u> by <u>Valentin</u> announces the launch of <u>mev.fyi</u>, an open-source research chatbot that focuses on the domain of MEV and blockchain research.
- Post on ethresearch by Valentin
- Post on ethresearch by Valentin
- <u>Steps to Achieve Atomic Execution in Rollups</u>by <u>Tariz</u> presents a framework for achieving atomic execution between rollups with minimal trust assumptions.
- Post by Tariz
- Post by Tariz
- <u>Unveiling Intelligent DeFi: The Coprocessor Revolution</u> by <u>Ψικε</u> explore how coprocessors can improve complex DeFi computations by facilitating off-chain computation with on-chain verification.
- Thread by Luke
- Thread by Luke
- Missed Slot Penalties [Temperature Check] by Max Resnick proposes an increase in penalties for missed slots to

reduce the negative effects of timing games.

What is Loss-Versus-Rebalancing (LVR)? by CoW Protocol delves into the intricacies of liquidity provision in AMMs and how CoW AMM is designed to capture LVR on behalf of LP.

## **Posts & Threads**

- <u>Titan Builder</u> published a <u>post</u> to announce that the <u>Titan Relay</u> is now live on mainnet.
- merkle published a thread to announce that off-chain bundles are now live on their builder.
- DODO published a <u>thread</u> that highlights ways to reduce MEV on DEXes through private transactions, batch auctions and dynamic slippage.

### **Talks & Discussions**

- MEV-Boost Community Call #8 hosted by Alex Stokes invited the MEV-Boost community to discuss Deneb, optimistic relaying, removing consensus-layer withdrawals from bid values, and more.
- Notes by <u>Terence Tsao</u>
- Notes by Christine Kim
- Notes by <u>Terence Tsao</u>
- Notes by Christine Kim
- Ethereum Sequencing and Preconfirmations Call #2 hosted by Justin Drake focused on potential risks and concerns of based sequencing and included presentations from Ellie Davidson, Cooper, mempirate, Ben Fisch, Ye Zhang and Alex Watts.
- Notes by <u>Drew Van der Werff</u> and <u>Sam Jernigan</u>
- Notes by Profesor Utonio
- Notes by <u>Drew Van der Werff</u> and <u>Sam Jernigan</u>
- Notes by Profesor Utonio
- Scraping Bits: How An Ethereum MEV Searcher Began Building Blocks As PenguinBuilderinvites libevm to discuss
  their journey as a searcher and block builder.
- <u>Debating Ethereum's Identity Crisis</u> by <u>Christine Kim</u> summarizes <u>ACDE call #181</u> and invites <u>Ben Edgington</u> for a discussion on inclusion lists, censorship resistance, and rollups.
- <u>CoW AMM Deep Dive</u> by <u>CoW DAO</u> invites <u>Andrea Canidio</u> and <u>Felix Leupold</u> for a deep dive into how <u>CoW AMM</u>
  works, and how it protects LPs from LVR.

## **Other**

• mev-boost improvement proposal #0 by Alex Stokes proposes a change to exclude withdrawals to fee recipients when relays computes a payload's value.

# **Upcoming events**

March 1

: <u>Beyond the Block: MEV Along the Txn Supply Chain</u> by <u>Titan</u> and <u>HashKey Capital</u> brings together actors along the transaction supply chain to discuss pre-confirmations, builder bidding strategies, MEV privacy, timing games, and more.

March 1

: <u>Ethereum Validator & Node Operator Summit</u> by <u>EthStaker</u>, <u>Staking Rewards</u>, and <u>bloXroute Labs</u> will host talks and panels related to staking, censorship resistance, timing games and more.

[Sign up here

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