

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

- [Parallel block building](#) by [@bert](#) introduces a [parallel block building](#) approach that processes non-conflicting transactions simultaneously to improve efficiency and increase block value.
- [Thread](#) by [@bert](#)
- [Thread](#) by [@bert](#)
- [ZTEE - Trustless Supply Chains](#) by [@Quintus](#), [Sylvain Bellemare](#), [Bunnie](#), and [Michael Gao](#) explores the challenges and potential solutions in establishing a verifiable supply chain for secure hardware.
- [Forum post](#) by [@Quintus](#)
- [Forum post](#) by [@Quintus](#)
- [Refund rule: wat dis, how to and FAQ](#) by [@Quintus](#) details the new [gas fee refunds](#) in [Flashbots](#)' builder that help searchers minimize costs by offering refunds through automated bid optimizations.
- [Thread](#) by [@Quintus](#)
- [Thread](#) by [@Quintus](#)
- [Conduit Launching Support for Rollup-Boost with Flashbots: Enhance User Experience and Internalize MEV](#) by [Henry Updegrave](#) details the launch of [Rollup-Boost](#) via [Conduit](#) to enhance rollups with decentralized block building, internalizing MEV, and better user experience.
- [Thread](#) by [Conduit](#)
- [Post](#) by [@Hasu](#)
- [Post](#) by [@Hasu](#)
- [Thread](#) by [Conduit](#)
- [Post](#) by [@Hasu](#)
- [Post](#) by [@Hasu](#)
- [Introduction to Rollup Boost Features, Architecture and Design](#) by [@Shana](#) outlines the architecture of [Rollup-Boost](#), enabling external block-building for OP Stack rollups as a modular sidecar without altering core OP Stack components.
- [Announcing In-Process rbuilder](#) by [@liamaharon](#) introduces the [reth-rbuilder crate](#), which allows [rbuilder](#) to run in-process with [reth](#), detailing the refactoring and technical adjustments made to enable tighter integration and optimized performance.
- [ethereum and the legend of the napkin](#) by [@phil](#) reflects on the strengths and weaknesses of Ethereum's informal research process and suggests steps toward a more scalable and structured research methodology.
- [Multilane Sequencing](#) by [@Tomasz](#) proposes a multilane sequencing model for L2s to enhance cross-chain interoperability and balance trade-offs between security, composability, and cost.
- [Automata <> Flashbots: TEE Validity Proof for OP-Stack](#) by [@YeChen](#) proposes a method for integrating the TEE validity proof and the external block builder with the OP Stack.
- [Securing Domain Certificates: Ensuring Exclusive Control by TEE](#) by [@shelven](#) and [@h4x3rotab](#) describes how to ensure that a TLS certificate for a specific domain is solely controlled by a TEE-based root-of-trust system (DeRoT), and mechanisms to protect against unauthorized certificate changes.
- [Proposers do play dice: Introducing random Execution Auctions \(randEAs\)](#) by [Thomas Thiery](#) details how auctioning future block proposal rights via random EAs, where proposers learn their exact slot one slot in advance, could help reduce multi-block MEV.
- [Post](#) by [Thomas Thiery](#)
- [Post](#) by [Thomas Thiery](#)

- [pm-AMM: A Uniform AMM for Prediction Markets](#) by [Ciamac Moallemi](#) and [Dan Robinson](#) introduces pm-AMM, an AMM optimized for prediction markets that aim to achieve consistent liquidity provisioning through Gaussian score dynamics.
- [Thread](#) by [Dan Robinson](#)
- [Thread](#) by [Dan Robinson](#)
- [Rebalancing-versus-Rebalancing: Improving the fidelity of Loss-versus-Rebalancing](#) by [Matthew Willetts](#) and [Christian Harrington](#) presents Rebalancing-versus-Rebalancing as a new model to assess AMM efficiency in comparison to CEXes, concluding that AMMs frequently deliver better execution.
- [Thread](#) by [Matthew Willetts](#)
- [Thread](#) by [Matthew Willetts](#)
- [Two Sides of the Same Coin: Large-scale Measurements of Builder and Rollup after EIP-4844](#) by [Yue Huang](#), [Shuzheng Wang](#), [Yuming Huang](#), [Jing Tang](#) examines how [EIP-4844](#) influences the profitability, and fee structures for builders and rollups.
- [Economic Implications of a Competitive Blob Market](#) by [Evan Kim](#) analyzes how intensified blob market competition leads to increased fees, and rollups adopting new strategies to ensure timely inclusion.
- [3-Slot-Finality Protocol for Ethereum](#) by [Francesco D'Amato](#), [Roberto Saltini](#), [Thanh-Hai Tran](#), and [Luca Zanolini](#) discusses Ethereum's vulnerability to MEV reorgs due to Gasper's finalization delay and presents a partially synchronous finality gadget that achieves finality within three slots.
- [Forum post](#) by [Roberto Saltini](#)
- [Thread](#) by [Luca Zanolini](#)
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- [Thread](#) by [Luca Zanolini](#)
- [Orbit SSF in Practice](#) by [Giulio Rebuffo](#) proposes an approach for implementing the [Orbit SSF](#) with minimal adjustments to the base Ethereum protocol.
- [Post](#) by [Giulio Rebuffo](#)
- [Post](#) by [Giulio Rebuffo](#)
- [Estimating the Revenue from Independent Sub-Slot Auction Preconfirmations](#) by [Finn Casey Fierro](#) and [@CTra1n](#) examines how preconfirmations via independent sub-slot auctions (ISSAs) affect proposer revenue.
- [Thread](#) by [@CTra1n](#)
- [Thread](#) by [@CTra1n](#)
- [Espresso Mainnet 0 is Live!](#) announces the Espresso Network's Mainnet 0, designed to enhance cross-chain composability through fast confirmations.
- [Thread](#) by [Espresso Systems](#)
- [Thread](#) by [Espresso Systems](#)
- [Tycho: The open-source liquidity indexer](#) by [PropellerHeads](#) introduces [Tycho](#), a protocol-agnostic liquidity indexing service with real-time state updates.
- [Thread](#) by [PropellerHeads](#)
- [Thread](#) by [PropellerHeads](#)
- [Enhancing Relay Capabilities with Commitment Filtering](#) by [Primev](#) presents commitment filtering improvements for MEV-Boost relays, enabling validators to enforce preferences and policies while minimizing latency impact.
- [Thread](#) by [Primev](#)

](https://primev.xyz/)

- [Thread](#) by [Primev](#)

](https://primev.xyz/)

Posts & Threads

- [Thomas Thiery](#) published a [thread](#) introducing [EIP-7805](#) as an implementation of [FOCIL](#) to improve transaction inclusion guarantees and censorship resistance.
- [FOCIL tracker](#) by [Julian Ma](#) and [Thomas Thiery](#)
- [Forum post](#) by [Thomas Thiery](#)
- [Post](#) by [Thomas Thiery](#)
- [Post](#) by [Davide Crapis](#)
- [FOCIL tracker](#) by [Julian Ma](#) and [Thomas Thiery](#)
- [Forum post](#) by [Thomas Thiery](#)
- [Post](#) by [Thomas Thiery](#)
- [Post](#) by [Davide Crapis](#)
- [@stephen](#) continued the [series of threads](#) exploring successful searcher strategies:
- [Day 20: Rebalancing cascade](#)
- [Day 22: Monster top of block arb](#)
- [DAY 23: Bridge fat-finger](#)
- [Day 20: Rebalancing cascade](#)
- [Day 22: Monster top of block arb](#)
- [DAY 23: Bridge fat-finger](#)
- [Alex Nezhlobin](#) published a [thread](#) detailing how active LPs on L2s are managing their liquidity near CEX prices to improve execution quality.
- [Albicodes](#) published a [thread](#) highlighting how TEEs enable decentralized, secure, and gamified social platforms where audiences can become co-creators.

Talks & Discussions

- [CryptoEcon roast&learn](#) hosted by [PBS Foundation](#) invites [@phil](#) , [Barnabé Monnot](#), [Max Resnick](#) for a conversation on MEV, decentralization, rollup design, and more.
- [Thread](#) by [PBS Foundation](#)
- [Thread](#) by [PBS Foundation](#)
- [MEV on L2](#) with [John Church](#), [Denisa Diaconescu](#), and [@tesa](#) explores the current state of MEV on L2s and discusses how things might evolve going forward.
- [Recordings](#) from [CBER Crafting the Cryptoeconomy Conference](#) hosted by [Columbia University's Center for Digital Finance and Technologies](#) have been uploaded:
- [Mitigation Techniques for Maximal Extractable Value](#) by [Julian Ma](#)
- [Maximal Extractable Value Overview](#) by [Ciamac Moallemi](#)
- [Order Flow Auctions](#) by [Joel Hasbrouck](#)
- [Economics of AMMs](#) by [Andreas Park](#)
- [Uniswap v4 Overview](#) by [Fahad Saleh](#)
- [Mitigation Techniques for Maximal Extractable Value](#) by [Julian Ma](#)
- [Maximal Extractable Value Overview](#) by [Ciamac Moallemi](#)
- [Order Flow Auctions](#) by [Joel Hasbrouck](#)

- [Economics of AMMs](#) by [Andreas Park](#)
- [Uniswap v4 Overview](#) by [Fahad Saleh](#)
- [The Gwart Show: Mechanism Design](#) invites [Elijah](#) to discuss MCP, decentralizing oracles, AMM designs, and more.
- [Post](#) by [Blockspace Media](#)
- [Post](#) by [Blockspace Media](#)
- [Bankless: Based Rollups: The Next Frontier of Ethereum Scaling](#) invites [Justin Drake](#) to give an update on the rollup-centric roadmap, shared sequencers, and the benefits of based rollups.
- [Beyond 4337: Vitalik Buterin's Vision for the Future of Account Abstraction](#) by [Vitalik Buterin](#) reviews the development of AA, and the next steps in improving security, UX, and chain abstraction.

Other

- [Flashbots at Devcon SEA](#) by [@vanlo](#) provides an overview of [Flashbots](#)' events, talks, and panels at [Devcon](#).
- [Surge](#) by [Nethermind](#) is a high throughput based Stage 2 rollup built on the [Taiko stack](#) for builders, developers & agents.
- [Thread](#) by [Nethermind](#)
- [Post](#) by [@Tomasz](#)
- [Thread](#) by [Nethermind](#)
- [Post](#) by [@Tomasz](#)

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