

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.

See our [Transparency Reports](#) for deeper dives into updates related to Flashbots.

Papers & Articles

- [Blockchain Privacy and Regulatory Compliance: Towards a Practical Equilibrium](#) by [Vitalik Buterin](#), [Jacob Illium](#), [Matthias Nadler](#), [Fabian Schär](#) and [Ameen Soleimani](#) study [Privacy Pools](#), a novel privacy-enhancing protocol that allows users to prove that their funds (do not) originate from known (un-)lawful sources, without publicly revealing their entire transaction graph.
- [Thread](#) by [Ameen Soleimani](#)
- [Thread](#) by [Ameen Soleimani](#)
- [RIG Update #2 — Science of Blockchain Conference \(SBC\) 2023](#) by [RIG](#) provides a summary of their latest research, a recap of SBC, and what's next.
- [Fun and games with inclusion lists](#) by [Barnabé Monnot](#) looks at the behaviors, games and attacks that may arise between rational proposers and builders as a consequence of inclusion lists.
- [Has anyone checked on EIP-1559 recently?](#) by [James Prestwich](#) presents a way for proposers and builders to collude and circumvent EIP-1559's fee adjustments by increasing the gas target

while keeping the actual block size

small. * [PR to Flashbots builder](#) by [James Prestwich](#)

- [Thread](#) by [Martin Köppelmann](#)
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- [Thread](#) by [Martin Köppelmann](#)
- [Strong Builder Identity for Combating Builder Imposter Attacks](#) by [Max Resnick](#), [Malleesh Pai](#) and [Kobi Gurkan](#) suggest builder signatures

as a stronger identity system for block builders, motivated by the recent [impersonation of Titan builder](#). * [Thread](#) by [Max Resnick](#)

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- [The False Narrative of MEV Protection: How Private Transactions Can Result in a Poorer Settlement Than Sending Publicly](#) by [Blair Marshall](#) investigates why some private transactions incur more

slippage than public transactions. * [Thread](#) by [Blair Marshall](#)

- [Thread](#) by [Blocknative](#)
- [Thread](#) by [Blair Marshall](#)
- [Thread](#) by [Blocknative](#)
- [Why multi-prover matters. SGX as a possible solution.](#) by [Lisa A.](#) and [Brecht Devos](#) explores how a multi-prover approach can hedge the risk of bugs and vulnerabilities in proving systems, with a focus on SGX.
- [Thread](#) by [Taiko](#)
- [Thread](#) by [Taiko](#)

Posts & threads

- [SMG](#) published [a thread](#) on the vertical integration between builders and searchers by analyzing the top-of-block bundle market.
- [Follow up thread](#) by [hazard](#)

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- [The mev.fyi project: MEV research content aggregator and search engine](#) by [Valentin](#) announces the [mev.fyi](#) project and encourages community contributions of resources related to MEV, incentive alignment, mechanism design, and their implications in the blockchain ecosystem.
- [Topic on ethresearch](#) by [Valentin](#)
- [Topic on ethresearch](#) by [Valentin](#)
- [Louis](#) published [a thread](#) on how “MEV-Boost+” and “MEV-Boost++”, described in [Censorship Resistance with Restaking](#) by [EigenLayer](#), would enhance Ethereum’s liveness guarantees and censorship resistance.
- [Stephy](#) published [a thread](#) on modular blockchains and how different rollup architectures handle settlement, sequencing, verification and data availability.
- [Steven Goldfeder](#) published [a post](#) to clarify the different meanings people assign to the term “decentralized sequencer” in the context of rollups.
- [Empowering Innovation: ERC-4337 Account Abstraction Grant Round Recipients](#) by [erc4337](#) announce the 18 recipients of the Ethereum Account Abstraction grant round.
- [Thread](#) by [erc4337](#)
- [Thread](#) by [erc4337](#)

Talks & Discussions

- [Community Call ft. Flashbots](#) hosted by [Rocket Pool](#) invited [Hasu](#) to talk about the history of Flashbots, from mev-geth and Flashbots Protect to MEV-Boost, MEV-Share and SUAVE.
- [Thread](#) by [Upshot Intern](#)
- [Thread](#) by [Upshot Intern](#)
- [Zero Knowledge - MEV, Mechanism Design & the Censorship Problem with Mallesh M Pai](#) invited [Tarun Chitra](#) and [Mallesh Pai](#) to explore mechanism design and Mallesh’s research on MEV and censorship.
- [Scraping Bits: MEV Operator Opens Up: Inside A Top 1% Web3 MEV Team Turned To Block Building - Ft. 0xPrincess](#) by [DeGatchi](#) had [0xprincess](#) on to talk about their experience as a searcher and block builder.

Other

- [The RareSkills Book of Gas Optimization](#) by [Jesseract](#), [michaelamadi.eth](#) and [supernovahs](#) is an extensive collection of tricks and best practices for gas optimization in Solidity.
- [banteg](#), [Mikko Ohtamaa](#) and others have [pooled together a bounty](#) for anyone who can demonstrate that an allowance frontrun has happened in the wild.

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