

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

- [Non-Atomic Arbitrage in Decentralized Finance](#) by [Lioba Heimbach](#), [Vabuk Pahari](#), [Eric Schertenleib](#) analyze CEX/DEX arbitrage and reveal that over 25% of DEX volume can be attributed to a small set of searchers performing non-atomic arbitrage.
- [Thread](#) by [atiselsts.eth](#)
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- [Playing the MEV Game on a First-Come-First-Served Blockchain](#) by [Burak Öz](#), [Jonas Gebele](#), [Parshant Singh](#), [Filip Rezabek](#), [Florian Matthes](#) expands on their [previous paper](#) that studied MEV strategies on FCFS-sequenced blockchains by introducing an arbitrage detection algorithm and potential network layer optimizations.
- [Thread](#) by [Burak Öz](#)
- [Thread](#) by [Burak Öz](#)
- [Illuminating Ethereum's Order Flow Landscape](#) by [Angela Lu](#) cast light on the evolving state of DeFi order and transaction flow, and discusses the challenges of building systems that remain decentralized while maximally benefiting the user.
- [Dashboard](#) by [Angela Lu](#), [Danning Sui](#) and [Jaden Durnford](#)
- [Thread](#) by [Angela Lu](#)
- [Dashboard](#) by [Angela Lu](#), [Danning Sui](#) and [Jaden Durnford](#)
- [Thread](#) by [Angela Lu](#)
- [SUAVE CHANGELOG - Simple Updates About Virtually Everything](#) by [Andy](#) provides details on new developments related to SUAVE from the last two weeks, including updates to [suave-geth](#), [suave-std](#), and [suapp-examples](#).
- [Debunking TEE FUD: A Brief Defense of The Use of TEEs in Crypto](#) by [Quintus Kilbourn](#) and [Andrew Miller](#) addresses common misconceptions about TEEs and their intended use.
- [Flashbots Protect Website](#) by [Shea Ketsdever](#) announces a [new website](#) for connecting and configuring Flashbots Protect in order to get protected from frontrunning and earn refunds.
- [Thread](#) by [Shea Ketsdever](#)
- [Thread](#) by [Shea Ketsdever](#)
- [Deciphering L2 MEV: Sequencer Workflow & MEV Data Analysis](#) by [DODO Research](#) and [hildobby](#) explores various approaches to L2 sequencing and their impact on MEV.
- [Thread](#) by [DODO Research](#)
- [Thread](#) by [DODO Research](#)
- [Trading in the Dark: Measuring Reordering Slippage in MEV](#) by [Evan Kim](#) and [Murat Akdeniz](#) examines costs and bidding behaviors related to reordering slippage on Uniswap v2 & v3.
- [Thread](#) by [Murat Akdeniz](#)
- [Thread](#) by [Murat Akdeniz](#)
- [Swimming Safely In The Public Mempool: MEV Smart Contract Obfuscation Techniques](#) by [DeGatchi](#) presents techniques for obfuscating smart contracts in order to avoid frontrunning in public mempools.
- [Essential Tools for Ethereum Block Builders](#) by [Cryptic Woods](#) describes the positive impact [bloXroute](#)'s BDN service has had on [penguinbuild](#) due to access to additional transactions.
- [Based Rollups can reward Proposers First Come First Serve](#) by [mteam](#) argues for why based rollups should use FCFS sequencing despite concerns about spam and MEV.

- [DAOs Must Confront Dark DAOs — Or Fall Under Their Shadow](#) by [James Austgen](#), [Andrés Fábrega](#), [Sarah Allen](#), [Kushal Babel](#), [Mahimna Kelkar](#), and [Ari Juels](#) provides an overview of Dark DAOs and introduces a [demo](#) that showcases vote-buying through a private smart contract.
- [Post](#) by [Ari Juels](#)
- [Post](#) by [Ari Juels](#)
- [CIP draft: Increasing liquidity for COW token via a programmatic order and an FM-AMM](#) by [Andrea Canidio](#) proposes that the CoW DAO allocate liquidity, using a programmatic order, to a Function Maximizing AMM (FM-AMM) designed to eliminate LVR and sandwich attacks.
- [Thread](#) by [Andrea Canidio](#)
- [Thread](#) by [Andrea Canidio](#)

Posts & Threads

- [Antero Eloranta](#) published a [thread](#) that presents results and open questions from the recently completed [FRP-35: Pair Trading Opportunities as a form of MEV](#) that researched pair trading on DEXes.
- [FastLane Labs](#) published a [thread](#) that provides a technical overview of SUAVE, the MEVM, and its potential impact on the Ethereum ecosystem.
- [DODO](#) published a [thread](#) that explores the prevalence of MEV on DEXes in the forms of sandwich attacks, arbitrage, and liquidations with data from [EigenPhi](#).
- [tldreasear.ch](#) published a [thread](#) to announce Feb 16

as the submission deadline for papers to be considered for the upcoming [TLDR Conference](#) in May.

- [Titan Builder](#) published a [post](#) to report that their domain had been suspended and DNS resolutions for RPC requests would start failing; the issue has since been [resolved](#).
- [Chorus One](#) published a [post](#) to announce that a portion of their proposers have started to use a custom MEV-Boost client based on their previous [research](#) to increase rewards.
- [Clayton Roche](#) published a [thread](#) that details educational resources related to the current MEV landscape.

Talks & Discussions

- [Scraping Bits](#):
- [Reopening The Mempool: Disrupting Monopolized Private MEV Orderflow](#) invites [Alex Watts](#) to discuss [FastLane Labs](#), private orderflow, democratizing MEV, and how FastLane Atlas will leverage SUAVE.
- [How A Trio Achieved A 87% Winrate Against Bloxroute's Mempool Aggregation](#) invites [mempirate](#) to discuss [Chainbound](#), providing services in the MEV supply chain, network optimizations, mempools, and more.
- [How Blocksec Intercepted \\$15M Of Web3 Exploits In Real Time](#) invites [Yajin \(Andy\) Zhou](#) to discuss how [Blocksec](#) intercepts and prevents web3 exploits in real-time.
- [Reopening The Mempool: Disrupting Monopolized Private MEV Orderflow](#) invites [Alex Watts](#) to discuss [FastLane Labs](#), private orderflow, democratizing MEV, and how FastLane Atlas will leverage SUAVE.
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- [MEV Crash Course | Maximal Extractable Value | PBS | Master MEV Bot | Searcher, Builder & Proposer](#) by [Uttam Singh](#) provides an overview of MEV, PBS, MEV-Boost, and invites [0xprincess](#) for a conversation on arbitrage.

Other

- [builder-specs v0.4.0 Sophon](#) by [Ethereum Foundation](#) has been released with changes required for Deneb, and support for spec testing.

Upcoming events

- Jan 26

: [FRP Unconference](#) hosted by [Flashbots](#) will be a virtual unconference to celebrate the success of Flashbots Research Proposals (FRPs) with a selection of lightning talks and a town hall, hosted in Gather Town.

- Mar 3-10

: [Makers & Breakers {In The Rockies}](#) hosted by [FastLane Labs](#) is a hackathon and dev-gathering in Aspen that will bring together mechanism designers, smart contract engineers, protocol developers, searchers and solvers. * [Post](#) by [Alex Watts](#)

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