A journey through MEV discourse.

2020, MEV Roast introduced research dialogue that lit up our journey through the dark forest, open and available to all.

2021, MEV.wtf explored the protocol and application level responses to the problem of MEV in a research unconference curated by 17 researchers, in collab with ETHGlobal.

2022, MEV.day embraced the light-mode and dark-mode of MEV on a dual-stage conference curated by 22 researchers, in collab with the Ethereum Foundation, CowSwap and Shutter Network.

2023 MEV-Week

PBS.day (Jul 22)- Keeping Crypto Decentralized

Note: PBS.day is the Day 2 Main Stage program @Modular Summit

Watch livestream / recording: https://www.youtube.com/live/WYH7n4M016A

PBS redefined the decade old paradigm of block production from the Bitcoin mining days. - Zaki Manian, 2021 - Catskills, NY

Proposer-builder separation (PBS) is a protocol <u>design philosophy</u> emphasizing the relationship between protocol and non-protocol actors for the maintenance and operation of a blockchain. It was first put forth in Vitalik's <u>2021 ethResearch post</u> as a market structure design that leverages the power of specialization to mitigate the centralizing pressure on the validator set from MEV by enabling the block construction process to be outsourced to highly specialized non-protocol actors known as block builders.

The introduction of the MEV-Boost protocol post Merge was an important early step for PBS. Despite its flaws, it has stood as a solid interim out-of-protocol solution as we continue to navigate through the PBS design space: from the elegant <u>PEPC</u> proposal to the latest version of the enshrined PBS (ePBS) design <u>PTC</u>.

- What is PBS and where are we today? What are the hardest consensus and market design challenges on the Ethereum L1 PBS R&D Roadmap?
- How does PBS apply to the modular stack? What does PBS on L2s and shared sequencers look like? How applicable
 is PBS beyond the Ethereum ecosystem?
- What cool innovations in block building e.g. advanced forms of aggregation can make a difference in augmenting the technical capabilities and improving user experience in the Ethereum ecosystem?

PBS.day Agenda

Chapter 0. MEV and PBS

14:00-14:25

Towards a Theory of MEV, Part II: Uncertainty

by Tarun Chitra (Gauntlet)

[recording] [slides]

14:25-14:40

Modularity, PBS and MEV: Freedom from the Bitcoin Mind Prison

by Zaki Manian (Sommerlier)

[recording] [slides]

14:40-14:55

Current State on Orderflow, Block Building, and the Latency Game

by Danning Sui (Flashbots - remote)

[recording] [slides]

14:55-15:15

SUAVE: Turning Zero-Sum to Positive-Sum Game

by Robert Miller (Flashbots)

[recording] [slides]

Chapter I. Ethereum L1 PBS

15:15-15:40

Ethereum PBS R&D Roadmap

by Mike Neuder (EF)

[recording] [slides]

15:40-16:05

Builders and More Advanced form of Aggregation

by Vitalik Buterin (EF)

[recording] [slides]

Chapter II. PBS on L2s and Beyond

16:05-16:20

PBS on L2s

by Georgios K (Paradigm)

[recording] [slides]

16:20-16:35

PBS-ifying Rollups: Prover-Sequencer Separation

by Toghrul Maharramov (Scroll)

[recording] [slides]

16:35-16:50

PBS across the Layers - from L1 to L1000

by Patrick McCorry (Arbitrum)

[recording] [slides]

16:50-17:05

MEV-Garden: Cross-domain Markets with PBS and SUAVE

by Tomasz K. Stańczak (Flashbots/Nethermind)

[recording] [slides]

17:05-17:20

Design Trade-offs in Proposals for Sequencer Decentralization

by Joe Andrews (Aztec)

[recording] [slides]

17:20-17:35

[recording] [slides]

^{**} Dumb blockchains require smart solutions: shared sequencing in the modular stack** by Ben Fisch (Espresso)

Exploring MEV Capture in Modular Systems

by Evan Forbes (Celestia)

[recording] [slides]

17:50-18:05

Reminiscences of a Rollup Operator

by Jon Charbonneau (DBA)

[recording] [slides]

Chapter III. The End Game

18:15-18:45

Panel: The End Game

[recording]

18:45-19:00

Co-creating the PBS Ecosystem R&D Treasure Map

by TINA (Flashbots)

[recording] [slides]

Agenda, abstracts, research questions will be updated on a rolling-basis. Event logistics can be found on Modular Summit website.

MEV.Salon (Jul 16-22)

MEV hackerhouse meets Parisian Salon. Every day of the week has a different salon for a focused deep dive, curated with your preferences and insights.

Flashbots

is plural. Whether you are a builder

, re[searcher]

or low-carb-crusader

, bring your thoughts, hard questions and good memes. Together we can turn zero-sum games into positive-sum games.

Blockspace is scarce and so are salon seats, we'll build the most profitable block with the most thoughtful content. For a potential seat at the discussions:

Vote now for the salons that you are interested in attending to help us load balance.

Reply in the thread below with research questions and insights.

Fill in the lu.ma invitations linked with each of the salons.

- 7/16 (Sunday evening) redistribution.salon
- 7/17 (Monday evening) -pbs.salon
- 7/18 (Tuesday evening) censorship.salon
- 7/19 (Wednesday afternoon) orderflow.salon
- 7/20 (Thursday afternoon) searcher.academy
- 7/21 (Friday morning) QPL research round table
- 7/21 (Friday afternoon) suave.salon

- 7/22 (Saturday evening) cryptoxai.salon
- Stay tuned: backrunning.party

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voters

MEV.Community (Jul 16-22)

Join us at these MEV community events with ecosystem partners across Paris:

- Pragma Paris with EthGlobal
- MEVparis.day with Frontier Research and CoW Protocol
- Funding the Commons and CryptoEconDay with Protocol Labs
- ... for more, explore the [MEV-Week rabbit hole

](https://www.notion.so/flashbots/MEV-Week-Paris-A-Hitchhiker-s-Guide-6522b2aa9c2f4acabbc648c9965f0751?pvs=4).

Flashbots is hiring! Explore our open roles here.