# Slot restructuring
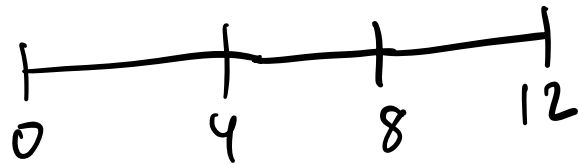
1) shorten slots
2) sub slot timings

doing nothing in the last 8 seconds,
could engineer away in clients
publish attestation at 4 seconds

```
|-------+---+---|
0       4   8   12
```

PR where clients publish attestation immediately. attestation to 4, and aggregation at 6.
   - should not microoptimize it too far
   - decreasing times == losing out on geographical diversity
   - other tasks (: db compaction)

Recomputing validator set hash a lot, at slot 0, usually clients will miss it more. Pruning happens early when it should happen later
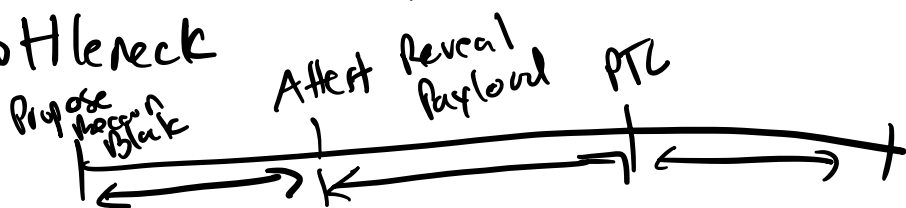
- Send attestation when done with validation

30~40% attestation at 4 second mark

- lot's of competition to propose as late as possible
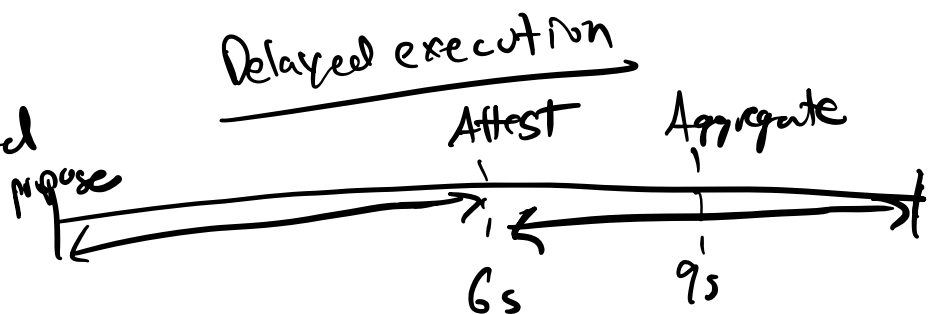- the builders determine when things happen

7732
7886 - delayed
propogation is biggest bottleneck

ePBS

ePBS
- mor time for propogation
- do an encrypted payload

Propose Message Block — Attest Reveal Payload — PTC

Delayed execution
Propose — Attest (6s) — Aggregate (9s)

- 4 core vs 16 core execution times are vastly different

- choosing head takes long time

Why shorter slot times - Dankrad

3 latencies =
- Precontirmation time (better UX)          shorter slots better
- time to reach cencorship resistance (better economics on DEX)
- finality (L2 interop) half finality == 2x speedup

Reducing slot times is square root relationship with MEV

Changing slot times or restructuring is going to be hard doing it
inflight, it would be easy if you are spinning up a new network
- have to start doing it early to be included for Glamsterdam
7886 or ePBS, we need to figure out slot structure first before
decreasing times

If you tie things together too much, progress will be hindered

Fix spec restructuring, name the constants, intervals whatever on the PR.

spec. says you need to attest as soon as you see the block.

Agreement across the board.

Rebalancing as soon as possible.

Affects EL, because it bussically effects gas per time