Overview of Lectures 2-7: Bootcamp on Classical Consensus

(Lecture Series on Foundations of Blockchains)

Summary of Lectures 2-7

Lecture 2: Synchronous model. Dolev-Strong protocol (for BB, SMR) tolerates any # of dishonest nodes.

Lecture 3: Synchronous model. Without PKI, need 67% honest. (Hexagon proof.)

Lecture 4: Asynchronous model. Definition. Start FLP impossibility.

Lecture 5: Asynchronous model. Finish proof of FLP impossibility.

Lecture 6: The partially synchronous model. Need 67% honest. The CAP Theorem.

Lecture 7: The Tendermint protocol + its provable guarantees.

"BFT-type" } failure = progress stalls

Consistency + "eventual" liveness

[start longest-chain consensus protocols in lecture 8]

failure = reorganization attacks