Starting off the thread for ZK resources.

Start Here

- ZK Hack Whiteboard Sessions
- Ingopedia [ignoyama]
- Zero Knowledge Canon, part 1 & 2 [a16z crypto]
- An approximate introduction to how zk-SNARKs are possible [Buterin, 2021]
- @Siny7 Notes
- Lecture 2: Overview of Modern SNARK Constructions (Part 1)[Boneh, et al.]
- Zero Knowledge Proofs: An illustrated primer [Green, 2014]
- <u>Learn</u> dot 0xparc dot org [0xParc, 2023]

ZK-VM

- Overview of RISC Zero zkVM
- RISC Zero ZKP Sequence Diagram and Spec
- ZK HACK III: Building On-chain Apps Off-chain Using RISC Zero
- OlaVM: An Ethereum compatible ZKVM
- =nil; zkLLVM Circuit Compiler. [Kaskov, Komarov, 2023]
- Zero-knowledge Virtual Machines, the Polaris License, and Vendor Lock-in [Wei Jie, 2021]

ZK-EVM

- Ethereum: A Secure Decentralized Generalized Transaction Ledger, Berlin Version [Wood, 2022]
- Ethereum: A Next-Generation Smart Contract and Decentralized Application Platform [Buterin, 2014]
- You think the EVM is slow? [@gakonst, 2022]
- <u>Taiko</u>: A Decentralized Ethereum-Equivalent ZK-Rollup
- <u>Taiko</u> ZK-EVM Specs
- PSE ZK-EVM
- <u>Introducing Scroll</u> Technical principles
- An overview of Scroll's architecture
- Starknet Docs: Simplified transaction flow
- A Guide to AppliedZKP zkEVM Circuit Code [@sin7y

, 2022]

- The Go Fast Machine: Adding Recursion to Polygon zkEVM
- ZK7: zkEVM circuit arithmetization [Ye Zhang, 2022]

Hardware Acceleration

- Cryptography for Secure Computing: A New Hardware Acceleration Opportunity [Gao, 2021]
- Hardware Acceleration for Zero Knowledge Proofs [[Konstantopoulos, 2022]
- Introducing Ingonyama Lowering the Barrier of Entry to ZKP [Igonyama, 2022]
- ZK8: Fantastic Beasts: unfolding ZK hardware [Shlomovits, 2022]
- Sparkworks: Cloud-ZK FPGA acceleration by running Arkworks Groth16 over the BN254 curve [ignonyama, geometry, 2022]

• Hardware acceleration for FHE [Verbauwhede, 2022]