

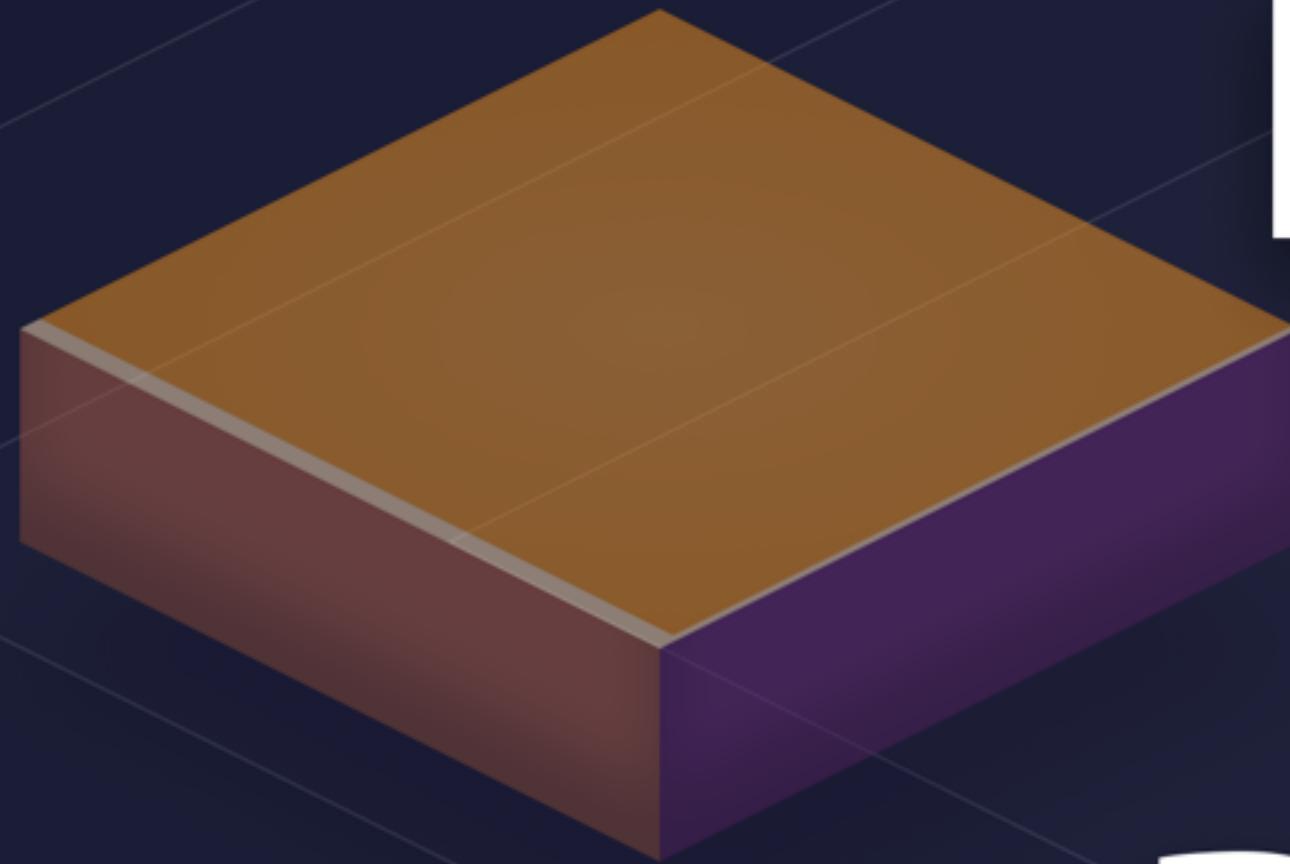
Rearchitecting the Blockchain Ecosystem



Jae Kwon

Founder of Cosmos - CEO of Tendermint

Evolution of Blockchain Development

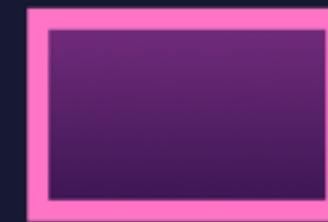


Gen 1: Forked Bitcoin Codebase

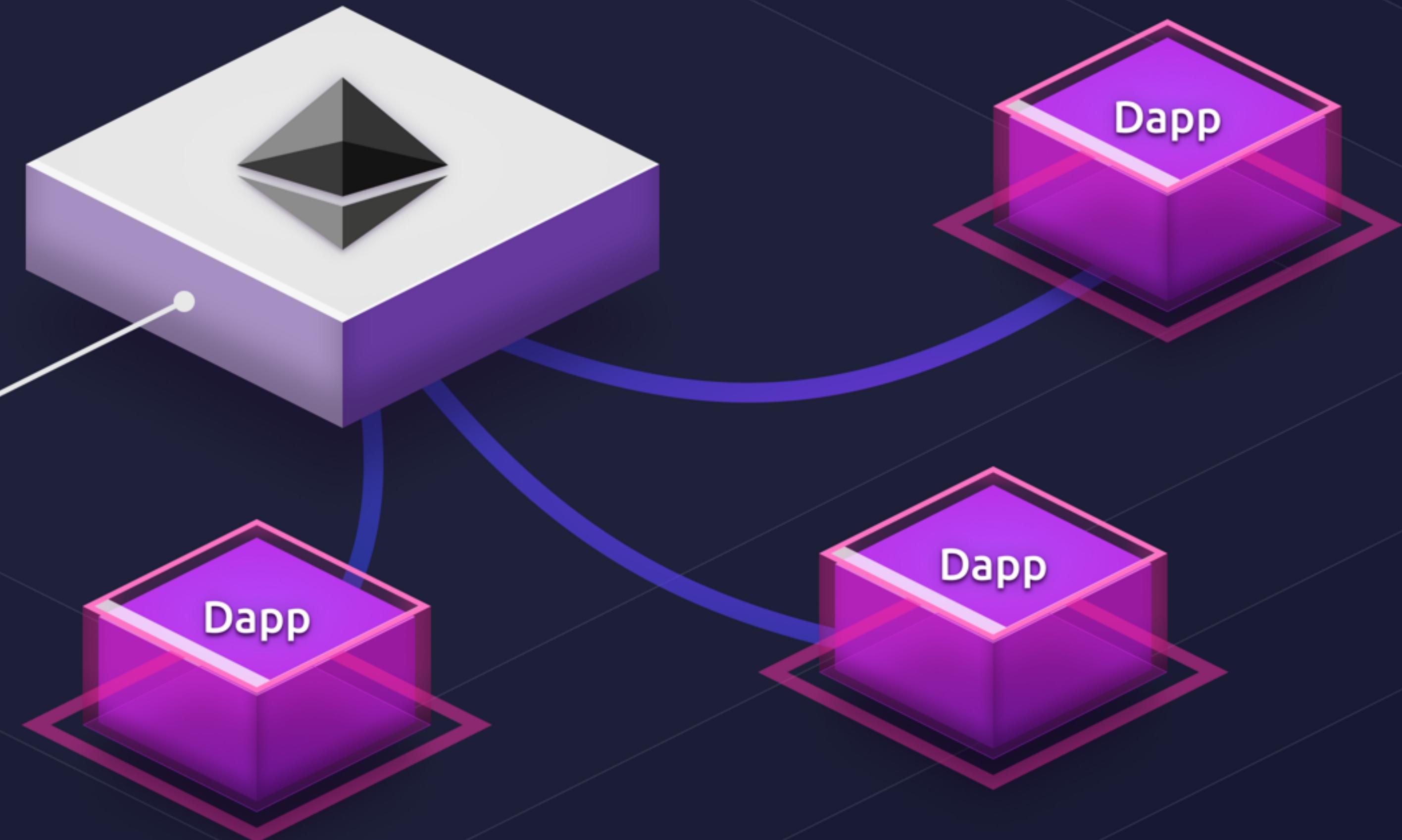


Gen 2: Ethereum Smart Contracts

Ether fee coin
Account model
Patricia tries
EVM
Proof of work

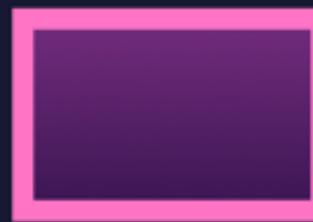


App Developer's
"Zone of Control"



Gen 3: Cosmos SDK

Secure
Modular
Extensible
Golang
Proof of stake

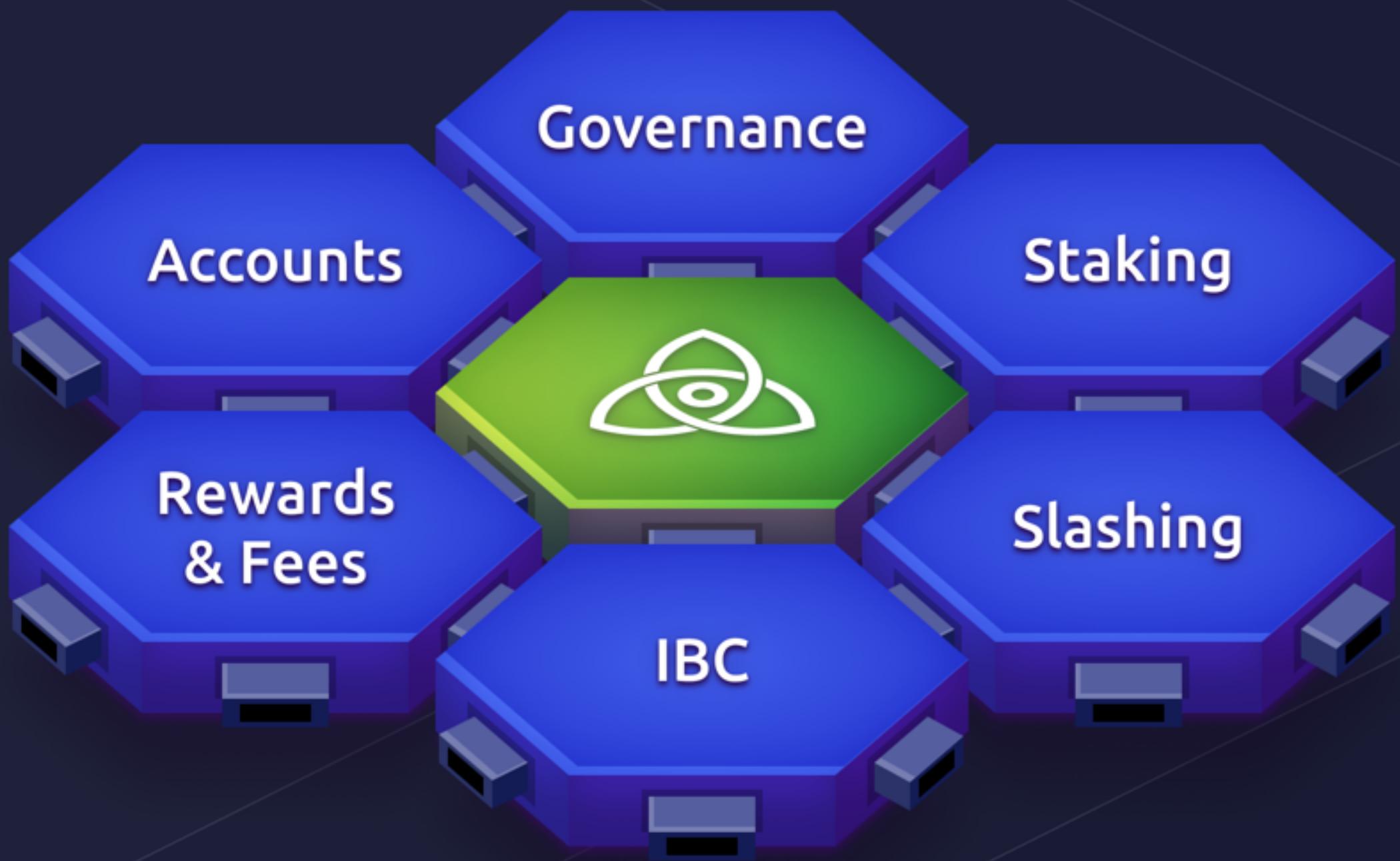


App Developer's
"Zone of Control"



Cosmos SDK: Developer Friendly

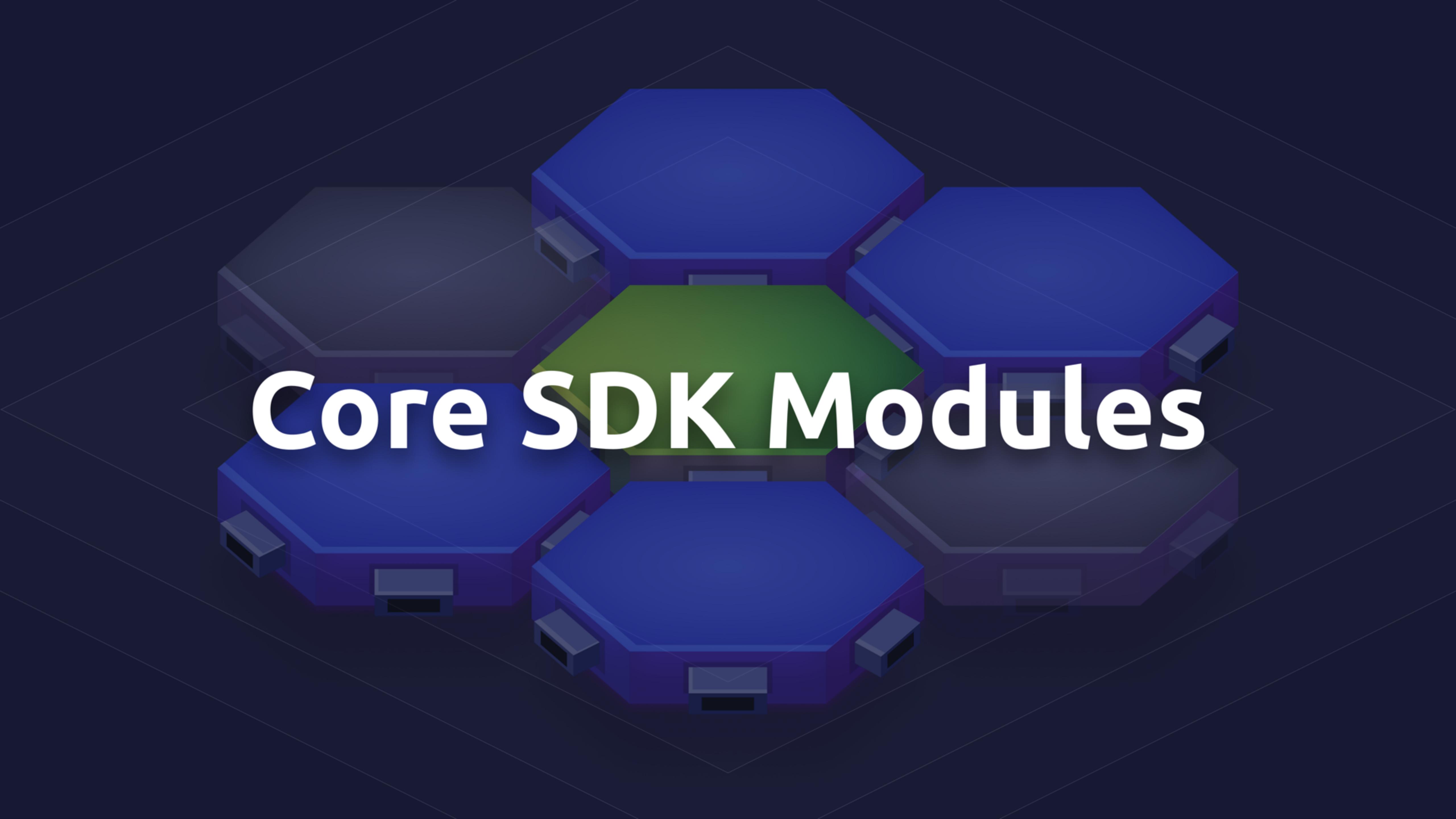
- Written in Go
- Like Ruby-on-Rails for building blockchains
- Completely open source and available on GitHub
- Secured by the principle of least authority



Cosmos SDK: Modular & Extensible

- Modular architecture for plug-and-play development
- Simply plug ready-built modules to add features to your blockchain
- Build new modules and share them downstream to enrich and contribute to the Cosmos-SDK ecosystem

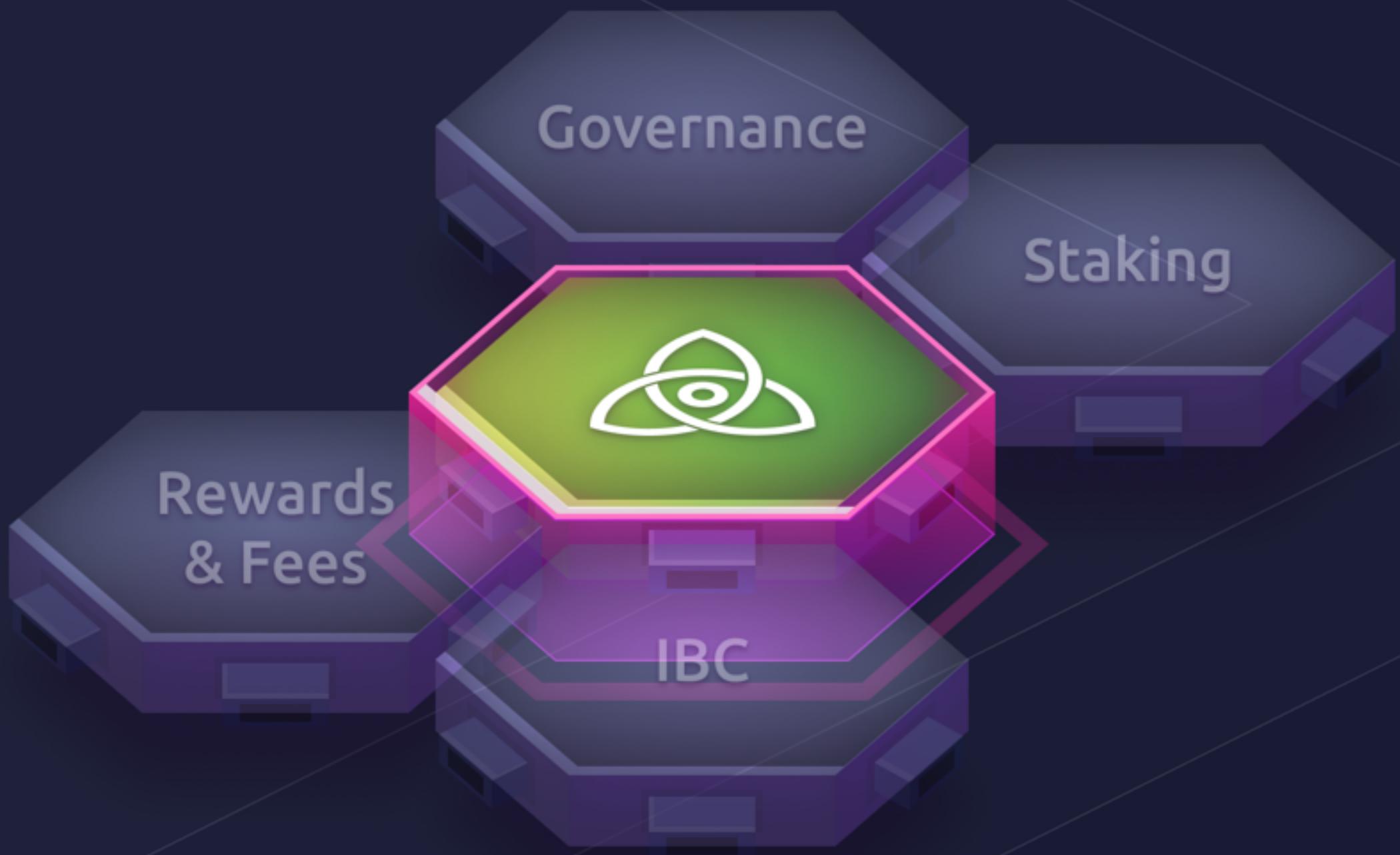




Core SDK Modules

Core Module: Tendermint

- Mature, state-of-the-art BFT consensus & networking protocol
- Vertical scaling solution for your base-layer chain
- Instant confirmation: 1 block finality
- 170+ validators on latest testnet
- Formally proven



Core Module: Proof of Stake

- Use your own coin for slashing and staking mechanics
- Maximize decentralization with delegation (through skin in the game)
- Mitigate long range attacks with an unbonding period



Core Module: Governance

- On-chain proposal system:
 - Text Updates
 - Automatic Parameter Changes
 - Software Upgrades
 - Liquid democracy for bonded stakeholders



Core Module: Rewards & Fees

- Use your own coin to pay fees when running a transaction - no lock-in.
- Multi-coin support for improved user experience.

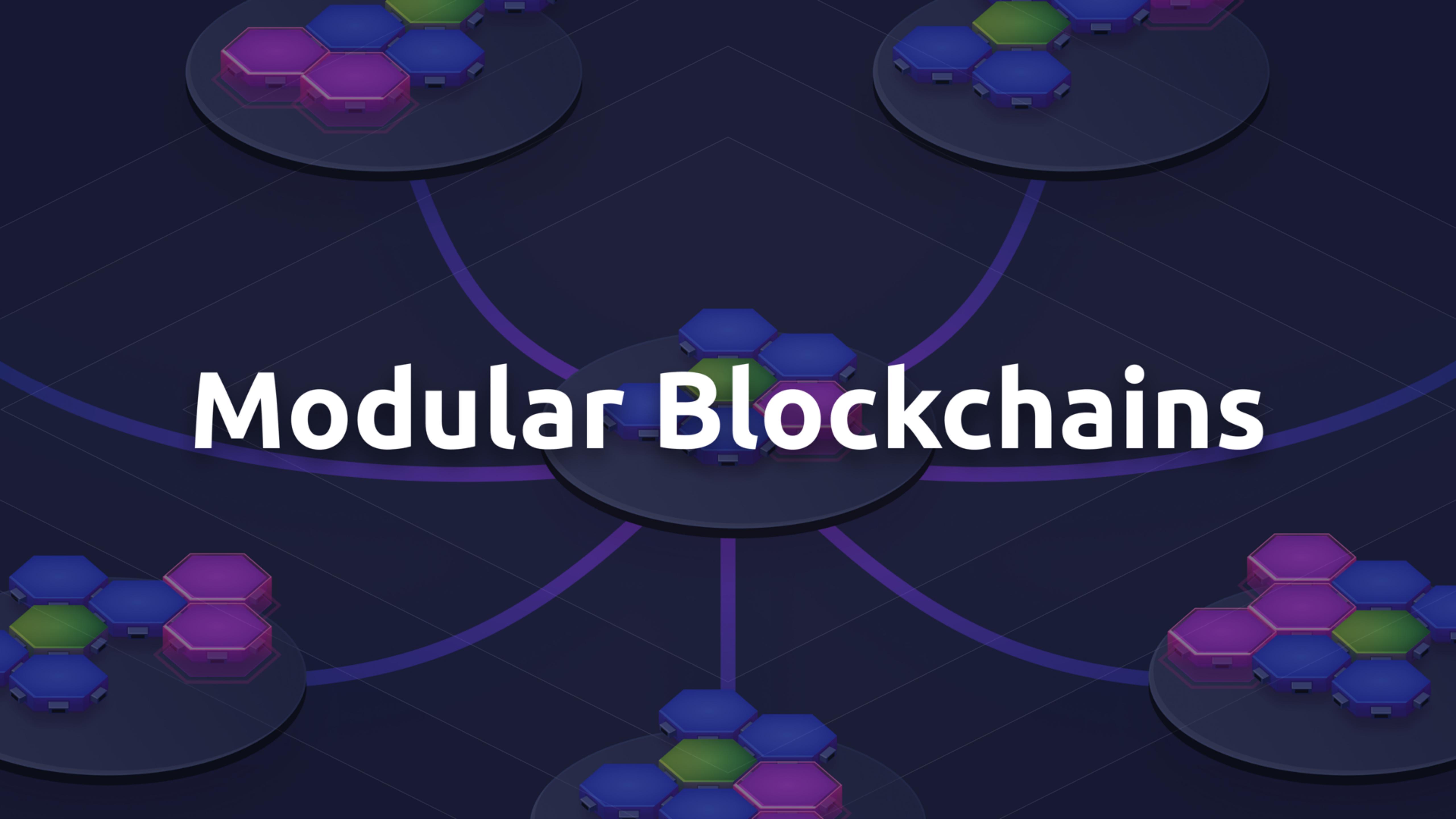


Core Module: IBC

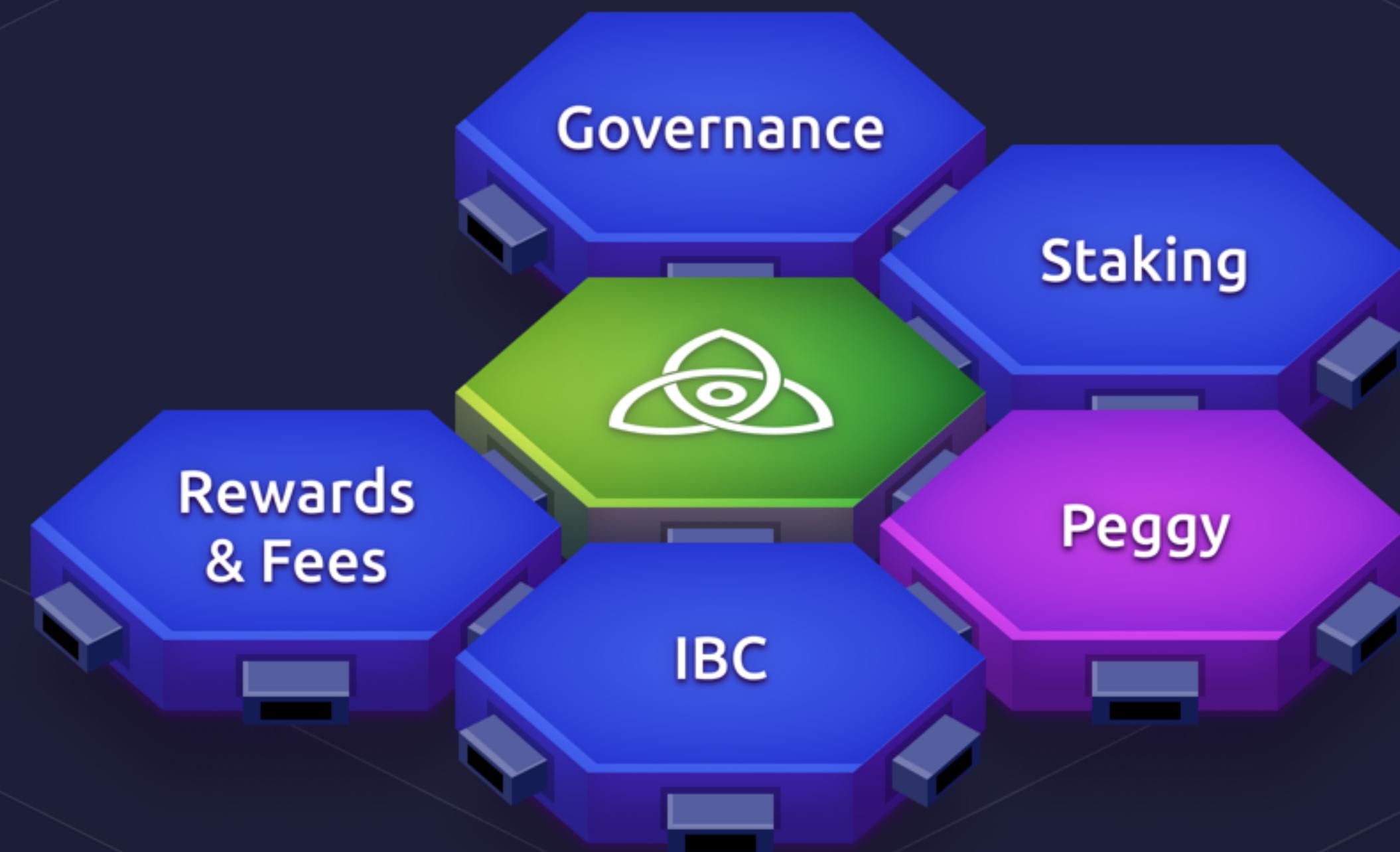
- The Inter-Blockchain Communication (IBC) Protocol enables the Internet of Blockchains
- Move coins & data between different blockchains
- Basis for horizontal scaling and interoperability
- Analogous to TCP/IP for the Internet



Modular Blockchains

The background features a dark blue gradient with a subtle grid pattern. Overlaid on this are several circular nodes, each containing a cluster of hexagonal blocks in shades of blue, green, and purple. These nodes are interconnected by thick, curved purple lines that form a network. The central node, which is larger than the others, contains the title text.

SDK + Peggy == Cosmos Hub



EVM + Shared Security == Ethermint



Microservices == IRIS Network



irisnet

irisnet.org



Rep, Auctions, BW Fees == LINO



Channels + ILP == Kava



Kava

kava.io

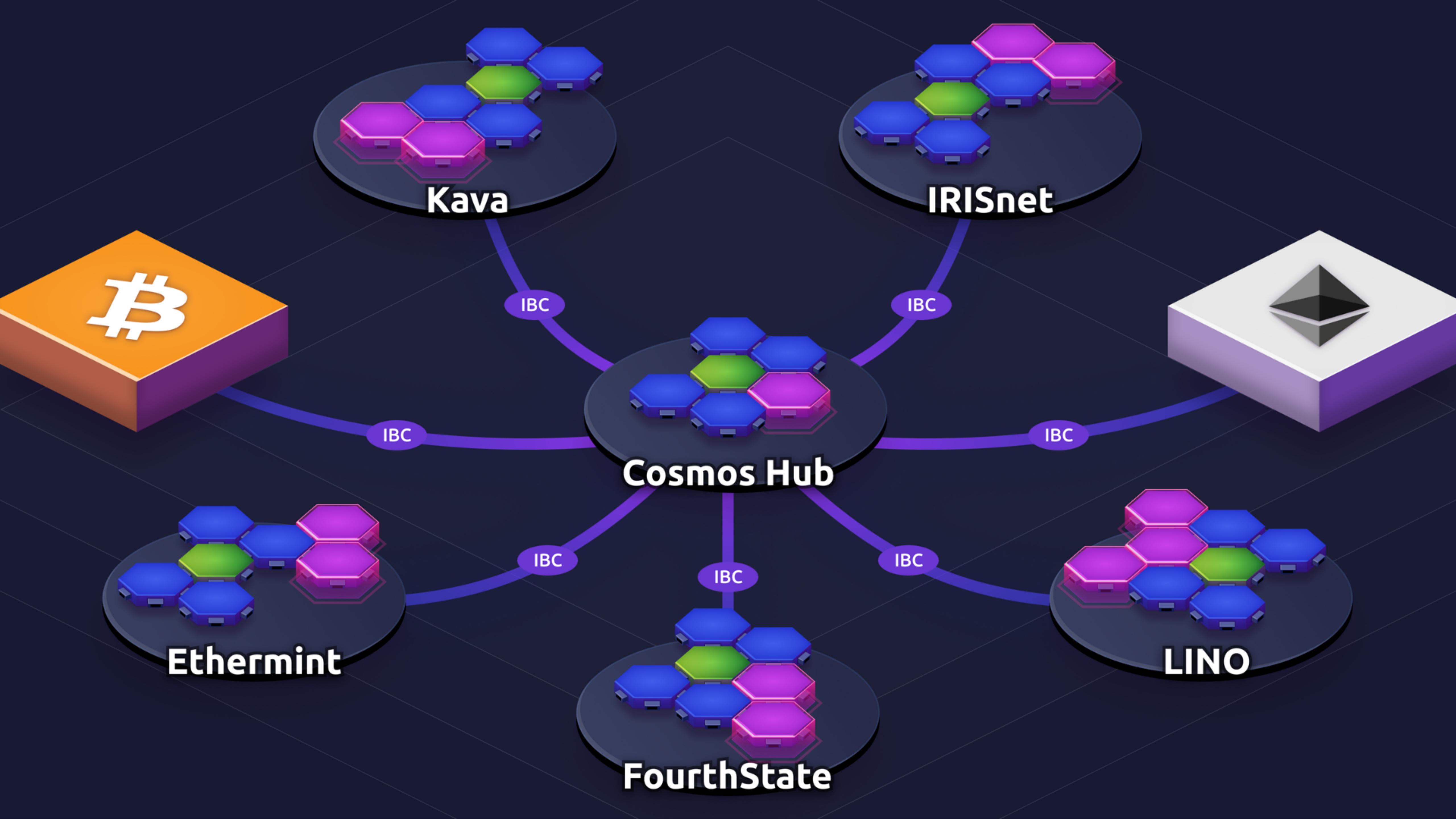


Peggy + Plasma == Fourth State



What Will You Build?







**Voyage Across
Zones
the Cosmos**
cosmos.network

Validators

Delegators