

Economic Design of Blockchain Protocols

Daide Grossi



university of
 groningen



UNIVERSITY OF AMSTERDAM

Is following *the* protocol rational?

+

Is *the* protocol correct?

Distributed Computing

Computational economics

Incentives

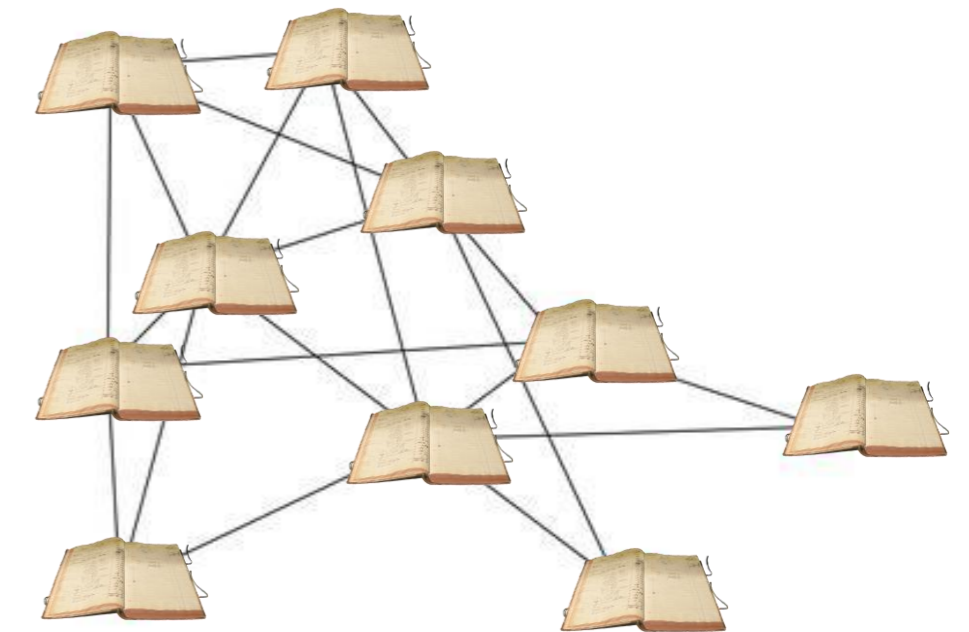
Consensus

us
Permissioned

Consensus
Permissionless

Mechanism
design
Social choice

Access control



Good protocol = Correct + Incentive-Compatible



Blockchain Protocol Design

=

Design of an Algorithmic Economy

- Interaction mechanisms. E.g. lotteries vs. voting
- Optimal level of token supply (inflationary or deflationary)?
- Tradeoffs: e.g., Sybil-proofness vs. token accumulation
- Token accumulation and decentralization?

Foundations needed!



Blockchain Protocol Design

=

Design of an Algorithmic Economy

