JoinMarket

-or-

Finding a Risk-Free Rate for Bitcoin

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JoinMarket Contributor

Scaling Bitcoin 2016 - Milan

Chris Oldwood @chrisoldwood · Oct 1

When you're cooking with mushrooms is it possible to substitute one sort for any other because they're fungible?

9 16

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“Once, however, money has been digitized, one of the services available for purchase can be the anonymous transfer of funds."

Eric Hughes, 1994-08-03

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- Hiding vs Deniability

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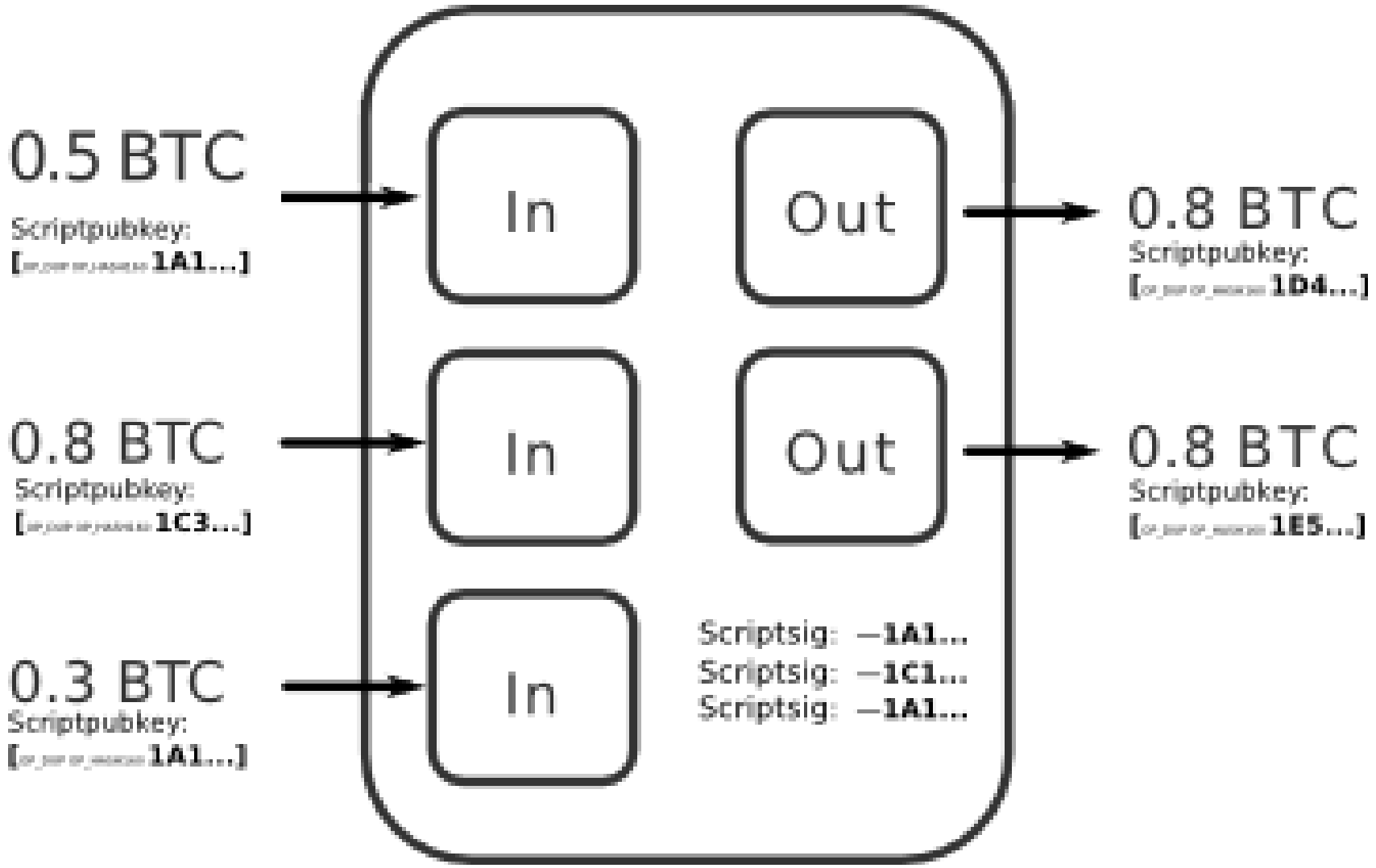
  - DarkWallet offers P2P CoinJoin but lacks consistent liquidity (users must wait)

The Simplest “Smart” Contract



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- Attract additional liquidity

JoinMarket Roles

Participant / "Maker"	Initiator / "Taker"

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Slight Privacy Gain	Larger Privacy Gain

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	Sign and broadcast

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- Information learned during an incomplete run of the protocol is thus **free**
- Malicious initiator can snoop which coins are provided by which participants
- By June 2016, most initiations failed to complete (real usage also increased)

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- Every message is signed
- Takers publish a unique-per-UTXO commitment before makers reveal inputs
- Malicious snoop must create fresh commitments, putting a cost on the attack

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- CoinSwap

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