

P2PMIXNOTE

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1. dining cryptographers networks: https://en.wikipedia.org/wiki/Dining_cryptographers_problem
2. DiceMix requires $4+2f$ rounds in the presence of f malicious peers.
3. bulletin board: a server receiving messages from each peer and broadcasting them to all other peers. (honest)
4. DiceMix built on synchronous settings. We can replace bulletin board using a reliable broadcast protocol.
5. the input messages must be fresh. (what if all honest nodes want to send messages at the same time, in this scenario all messages are not random)
6. termination is impossible to achieve against a malicious bulletin board, which can just block all communication.
- 7.3 needs: 1. key exchange mechanisms 2. all nodes publish a message simultaneously, 3. ensuring termination.
8. handling collisions: redundancy. building slots: $S_j = \sum m_i^j$
9. non-malleable commitment. preventing malicious peers from choosing their DC-net vectors depending on DC-net vectors of others. If bulletin board can be trusted then when can omit this.
10. KE- \rightarrow CM- \rightarrow DC- \rightarrow CF if everything OK.