

Hi Ethereum Researchers,

I recently published a short paper describing a particular kind of attack on mixers: Sybil attacks. This is one step towards analyzing and assessing the risks with mixers in order to provide users with the best possible options given various tradeoffs.

Here's the [link](#).

The abstract is posted below:

Sybil attacks are a well-studied problem in peer-to-peer networking systems. However, their relevance to cryptocurrency mixers has received little attention in the literature, with only a few papers in recent times aiming to design mixers that are resistant to Sybil attacks. A lot of the research has been primarily driven by independent cryptocurrency enthusiasts. We attempt to provide a few characterizations of Sybil attacks as they pertain to mixers and provide mitigations based on economics in order to disincentive Sybil attacks against mixers. In doing so, we highlight that the security of mixers need not only be analyzed through the use of cryptographic techniques but also with the use of economic techniques. Moreover, we provide future research directions in determining heuristics for detecting Sybil identities in mixers.