Dissent in Numbers: Making Strong Anonymity Scale

<u>David Isaac Wolinsky, Henry Corrigan-Gibbs, and Bryan Ford</u> (Yale University 2012): "Dissent in Numbers: Making Strong Anonymity Scale" — ein Text über die Zukunft von und die Alternativen zu Tor.

This paper has made the case that by delegating collective trust to a decentralized group of servers, strong anonymity techniques offering traffic analysis resistance may be adapted and scaled to offer anonymity in groups of thousands of nodes, two orders of magnitude larger than previous systems offering strong anonymity. Through its novel client/server DC-nets model, Dissent is able to accommodate anonymity set sizes of up to 5,000 members, while maintaining end-to-end latency low enough to enable wide-area interactive messaging. In localarea settings, Dissent is fast enough to handle interactive Web browsing while still offering users strong local anonymity guarantees. Although Dissent represents a step towards strong anonymous communication at large Internet scales, many challenges remain for future work, such as further scalability and robustness improvements and protection against long-term intersection attacks.