[rami-github/adaptive-dispute-cutoffs](#)

A proof of concept implementation of ADC for EVM. Contribute to rami-github/adaptive-dispute-cutoffs development by creating an account on GitHub.

tl;dr

Current protocols have fixed time periods during which participants can dispute any fraud attempts. However, current blockchains have limited transaction processing capacity, so a fixed dispute period will not always be sufficient to deter all fraudulent behaviour in an off-chain protocol. We describe how to set adaptive dispute periods that accommodate the congestion and capacity of the underlying blockchain. We describe a non-interactive argument system for setting adaptive dispute periods under the current Ethereum Virtual Machine, and discuss how to efficiently integrate built-in support for adaptive dispute periods in any blockchain. We empirically demonstrate that an adaptive-dispute second-layer protocol can handle a larger number of disputes and prevent more fraud than its non-adaptive counterparts even when users are slow to issue disputes, due to denial of service or blockchain congestion.