Hi all,

Posting here the output of FRP 22 "Quantifying the Impact of Frontrunning and Randomness on UX." I built the foundations of a probabilistic approach to mempool dynamics from the perspective of a trader on a CFMM. The model combines elements from game theory and queueing theory (more of the latter than I expected when I started the project!) and is computable, at least in some limits discussed in the paper.

Comments and suggestions welcome!

Blog post: [Adversarial blockchain queues and trading on a CFMM | a w macpherson](#)

Paper: [[2302.01663] Adversarial blockchain queues and trading on a CFMM](#)