Quantum Finance in Defi

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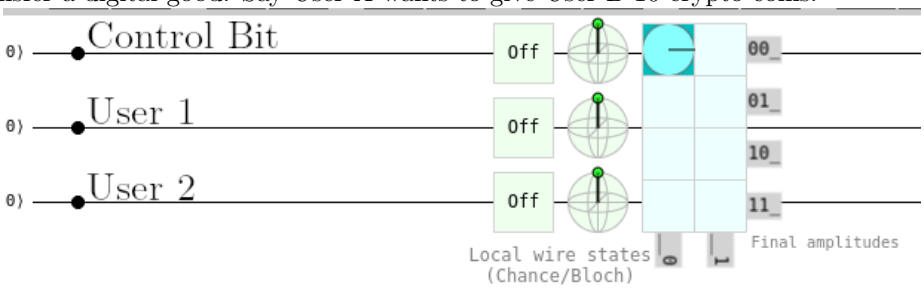
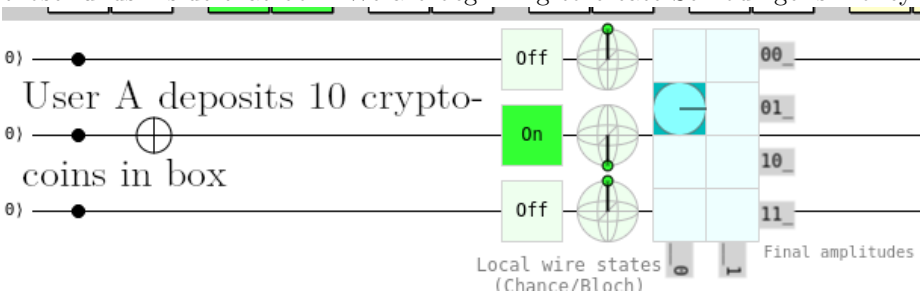
1 Introduction

So I'd figure it be amusing to try this out. Hook up a blockchain oracle to a quantum computer, and make hilarious functions that test our understanding of what it means to trade in a super-turing environment. Experiment alpha executes a transfer of tokens from party A to Party B through the use of a 3rd affilate cubit. Hopefully this trinary state makes good on Donald Knuths hope that transitioning from binary to trinary would be a good day indeed.

Inducing repeated prisoners dilemma, quantum pre-commitments for distributed and decentralized networks. Quantum Honour Box. Let the control bit be operated as a Trusted execution environment for User A and user B to transfer a digital good. Say User A wants to give User B 10 crypto coins.

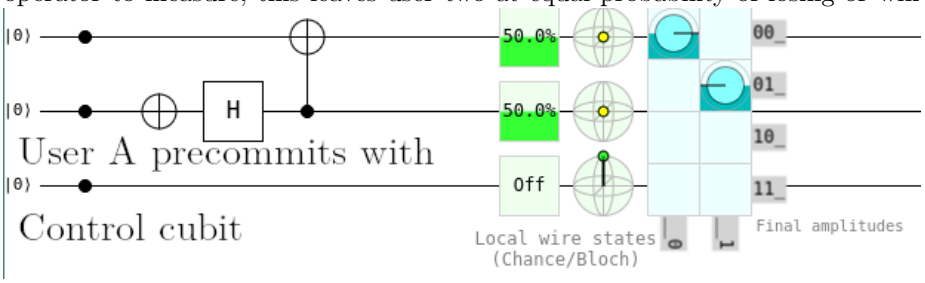


User A begins by depositing their 10 crypto coins inside the 'quantum honour box', which sets their cubit to $|1>$ this pure state affirms the 100% existence of those funds inside that box. We are beginning to create Schrodinger's money.

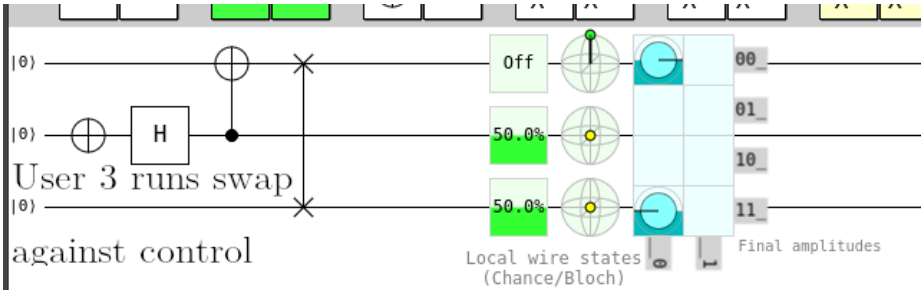


User A pre-commits the funds for transfer with the control bit. which runs the entanglement operator between User 1 and User 2 cubits, Hadamard CNOT.

This creates a state where, the control bit is 50% likely to hold the box if the party chooses to withdrawal and vice versa. As the control bit does not have an operator to measure, this leaves user two at equal probability of losing or win



User C implements a swap gate with the control bit, if either user 2 or user 3 measure the state by withdrawing, there is a 50% chance that both will come out with whats in the box, and 50% chance neither do. This extra coin is minted by the protocol in the eventuality, or saved by the protocol or perhaps burned upon the other realization



The procedure above describes how one could set up a transfer of funds from user A to user B using entanglement to facilitate a shared state with a control bit. The mint functionality is built into this ciruit, where by measuring whats inside the box, that —11¿ is possible in equal proportion to —00¿ We can begin to visualize a whole landscape of new game theories that involve making deriviates on unmeasured states, doing regulatory control through a cubit and possibly much more.