## Fair Price Discovery with Decentrlized Exchange

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## Abstract

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## 1 Introduction

Ever since bitcoin poeple have been trying to use the same techniques towards a decentralized exchange. Exchange has been well researched and developed in traditional centralized finaince for well over a century. [exchange cite]

The word "central" is part of the common definitio of an exchange. "A central place where buying and sellers come to finf price and execute trades.

The pupose of exchage is two fold. 1 - for price disoverry [cite] 2 - for counter party settlement

Due to early bitcoin exchange hacks, Decentrlized Exchange or (DEX), has been mostly focused on the non-custodial side for the settlement utility.

We focusing on the real public service of an Exchange, the price disovery utility. We design price discovery within a DEX, with a pupose of "Fair Price Discovery".

With, Fair Price Disovery (FPD), as our goal. We focus on a mechanism designed exchange, for reaching equalibriam which produces price.

Taking inspiration from Rational Protocol Design analysis of Bitcoin, and looking back to the original Bitcoin white-paper.

examaning the state of teh art in price-disovery, High Freaquernney Market Making, and electronic exchange matching engines

Since Bitcoin showed us how peer to peer electroic cash was possible, we have researching if and how peer-to-peer exchange was possible.

Exchanges are a critial part of the financial markets.

Ecological balalnce otherwise the order-driven market can colapse Transparency is an important feature

first to win is most important

First document. This is a simple example, with no extra parameters or packages included. not sure

## 2 Results