



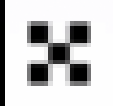


# Defi Liquidity Report

## The Graph (GRT)

The Graph is working to bring reliable decentralized public infrastructure to the mainstream market. To ensure economic security of The Graph Network and the integrity of data being queried, participants use Graph Tokens (GRT).

# Major Liquidity Venues

Venue	Type	24hr Volume	% of Volume
Binance 	Cefi	14.47 million	22%
Coinbase 	Cefi	4.58 million	6.9%
Uniswap v2 	Defi	0.063 million	0.1%
Uniswap v3 	Defi	0.186 million	0.3%
Bybit 	Cefi	1.70 million	2.61%
Okex 	Cefi	1.67 million	2.57%

\*All stats as of 7th March 2023



# Defi Liquidity Depth

Slippage when swapping USDC to GRT through linch (non RFQ venues)

50K USDC

2.6%

100K USDC

5.1%

500K USDC

23.7%

1 M USDC

41.7%



# Uniswap V3 Liquidity

## Major LPs

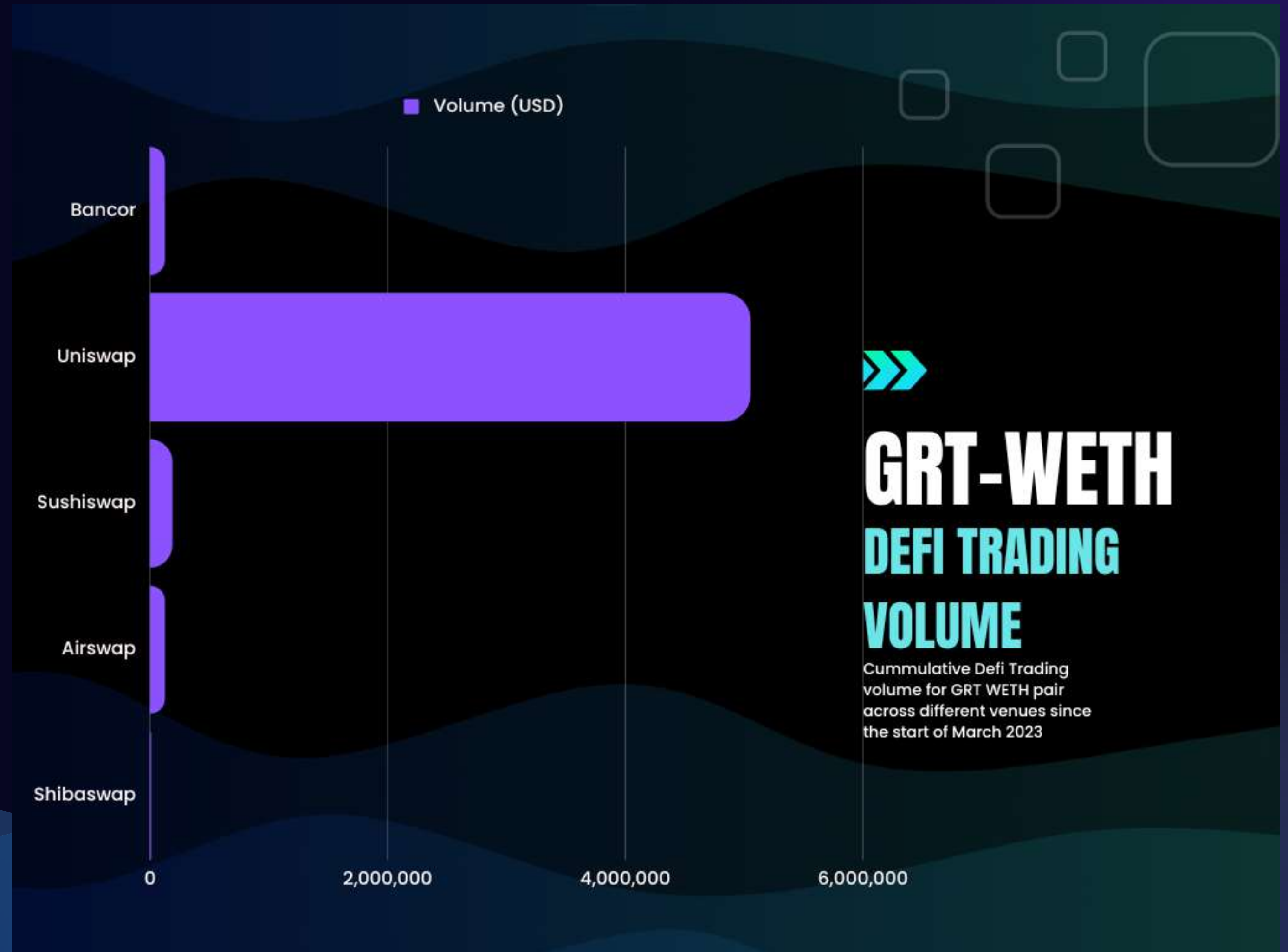
Position ID	Owner	Age	% of Pool	Width	Real APY
426525	0x0321...7d04	42 days	22.2%	[0.71x, 2.85x]	75.29%
436949	0x0321...7d04	29 days	9.18%	[0.40x, 1.62x]	46.71%
442363	0xeef7...4e8b	24 days	6.86%	[0.55x, 1.11x]	59.16%
454427	0x23a0...6697	11 days	5.93%	[0.39x, 1.19x]	34.69%
220788	0x0c9f...742c	333 days	5.55%	[0.26x, 1.79x]	20.93%

\*All stats as of 13th March 2023  
Real APY shows yield with auto compounding  
fees compared to holding on spot.



# Defi Trading Venues

More than 90% of the defi trading volume for GRT WETH pair goes through Uniswap





# Insights

GRT is the work utility token that coordinates data providers and consumers. Delegators delegate their GRT on their preferred Indexers to earn yield for their GRT holdings. Over 1 billion GRT (worth around 145 million USD) have been staked across the top 5 delegators earning around 10% APY.

IndexersCuratorsDelegators

CURRENT BLOCK  
#16823395

Q Search 466 Indexers by ID or Name

Expand Table

INDEXER	SUBGRAPHS	ESTIMATED APR	Revenue QUERY FEES	INDEXER REWARDS	Stake OWNED	DELEGATED	ALLOCATED	
<div><div>p2p-org.eth</div><div>0x5a89-8a053e</div></div>	<div><div></div><div></div><div></div><div>+114</div></div>	11.18%	45.15K	104.54M	36.21M	305.54M	348.46M	
<div><div>protofire.eth</div><div>0xb060-a913e4</div></div>	<div><div></div><div></div><div></div><div>+22</div></div>	10.12%	106.24K	54.78M	25.05M	217.79M	242.67M	
<div><div>framework-labs....</div><div>0x85fe-e5372d</div></div>	<div><div></div><div></div><div></div><div>+35</div></div>	10.61%	45.33K	64.98M	13.07M	205.22M	218.28M	
<div><div>figment-prime-2....</div><div>0x6125-e429e7</div></div>	<div><div></div><div></div><div></div><div>+17</div></div>	9.33%	66.22K	40.83M	20.85M	195.52M	217.96M	
<div><div>figment-prime.eth</div><div>0x6ac8-4c05c5</div></div>	<div><div></div><div></div><div></div><div>+17</div></div>	6.29%	32.58K	6.76M	7.16M	85.74M	92.90M	



# Insights

Compared to the GRT staked across delegators, the liquidity on the defi side is very thin leading to bad UX for people entering and exiting. Some PMMs do quote for the GRT ETH pairs on aggregators like Paraswap, 1inch but during volatile periods, their spreads can be wide and suboptimal.

An alternative for people to interact is to trade for GRT on cefi exchanges like Binance, Coinbase but this creates friction for all counterparties ( Delegators, Curators, Indexers and Developers )

A liquid market for GRT on a decentralized venue like Uniswap v3 will enable-

**Developers** to easily query and build subgraphs without having to go to cefi exchanges for getting GRT tokens.

**Indexers** to freely realize some of their GRT rewards to pay for operational costs.

**Delegators** to freely enter and exit delegation markets for Indexers at scale. A liquid Uniswap v3 market will also make it possible for delegators to hedge their stakes and not worry for the exposure during the long unbonding period (around 26 days) in the future when projects like Infinity Pools, Panoptic etc open derivative markets on top of Uniswap v3 pool.

**Subgraphs are one of the most important lego for any web3 project and a liquid market for GRT token on Uniswap v3 will pave the way for network effects to play out for The Graph Network to reach the next phase of mass adoption.**





In comes **Range Protocol**,  
charging in to save the day



**Range Protocol** will be the infrastructure for on chain market making on top of concentrated liquidity AMMs like Uniswap v3. Our vision is to make defi efficient enough so that it becomes the venue for price discovery instead of Tier 1 Cefi exchanges like Binance, Coinbase.

From the mountaintop of abstraction, we are

# Uniswap v3 + Hashflow Combined

One of our offerings, Liquidity Enhancing Strategies will allow The Graph team to have deeper liquidity for GRT token in the most capital efficient manner. ALM's Strategies can provide liquidity in very narrow range such that

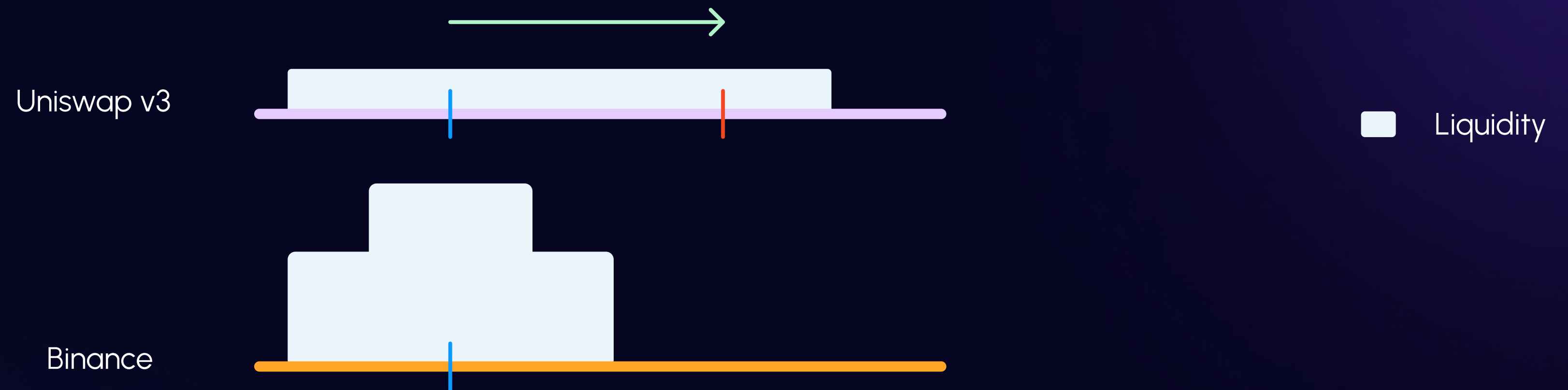
Trading fees earned > Impermanent Loss + Rebalancing Cost

And then optimize for rebalancing by creating a payment for order flow model where PMMs (Private Market Makers) /arbitrage bots can come in and help swap in the most optimal and trustless way using JIT (Just in Time Liquidity).

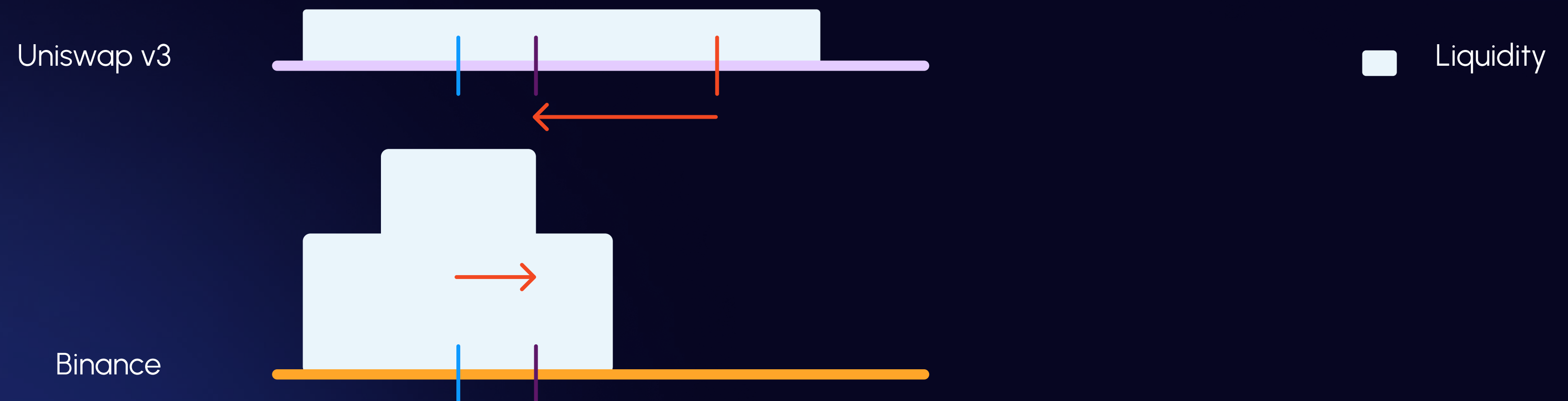
Through this, we can replicate GRT liquidity of tier 1 cefi exchanges over Uniswap v3 pool.



In the current model, if someone trades a significant amount on the Uniswap v3 pool, there will be significant slippage and price will move far away from the prices at other liquidity venues.



Then an **arbitrageur** comes in and brings back the price in equilibrium on the two venues.

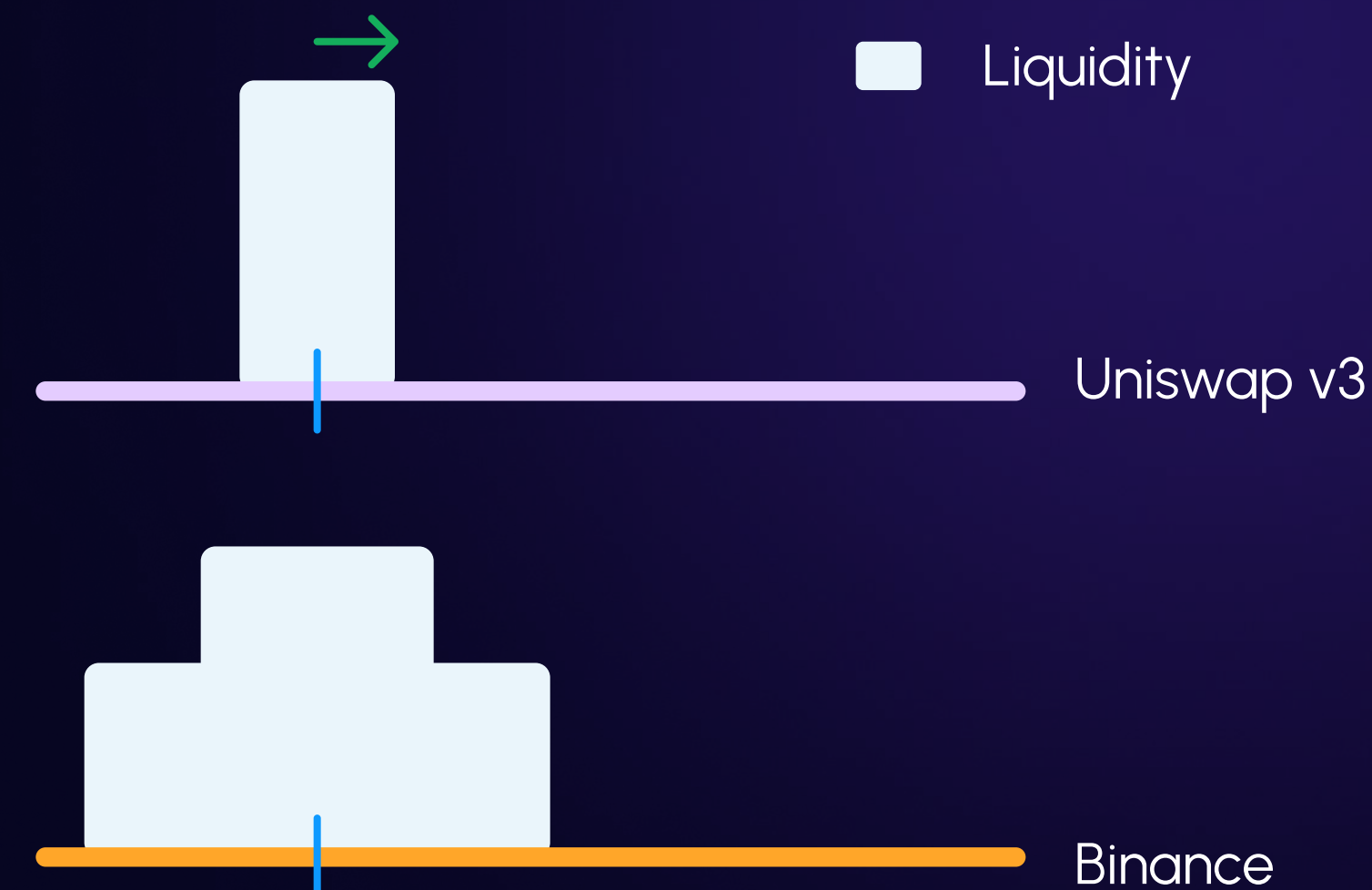


The current model is inefficient. This profit made by arbitrageurs turns into the impermanent loss for liquidity providers on the Uniswap v3 pool



**With our Liquidity Enhancing strategies**, we will turn this model upside down by turning this cost center for LPs (impermanant loss created by arbitrageur's profit) to revenue center (trading fees earned).

1. ALMs (Active Liquidity Managers) will provide liquidity in narrow price ranges. The biggest barrier to providing liquidity on Uniswap v3 in a narrow range is significant slippage while rebalancing.






## Rebalance transaction

Swap 100  to 

Best Bid



## Bids

PMM1	1,140,200	
PMM2	1,140,300	
Arb_Bot	1,130,900	

2. We will optimize this by creating an auction window for rebalancing where systematic players like PMMs, arbitrage bots etc can submit bids. At the end of the window, we will set the maximum slippage for the rebalancing swap as the best bid price and then sign the transaction and broadcast



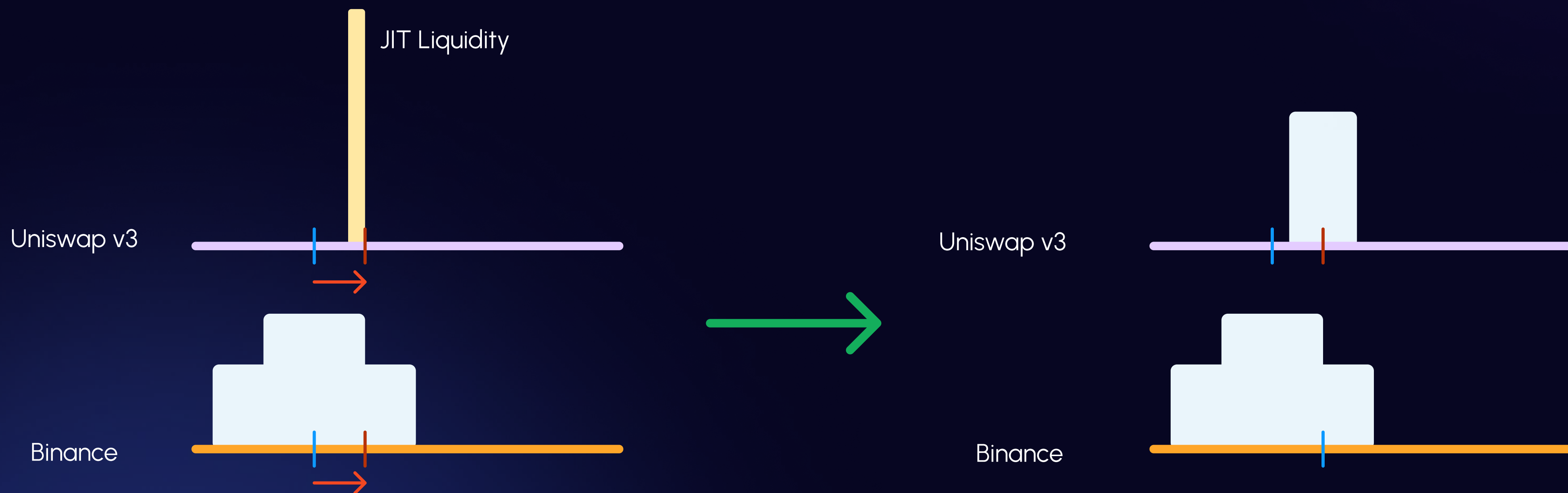
3. The winner with the best bid can now sandwich the rebalance transaction with the JIT Liquidity transactions at his bid. In this way, LP position gets rebalanced in an optimal and trustless manner as if we aggregated the liquidity across all venues to swap similar to a RFQ trade on Hashflow.

Add JIT Liquidity at Best Bid

Rebalance (Swap tx)

Remove JIT Liquidity

4. After this sandwich bundle is confirmed, ALM (Active Liquidity Manager) can add liquidity again around the new price. In this way, we removed arbitrage opportunity before it actually appeared and indirectly replicated Binance orderbook over Uniswap v3 pool.



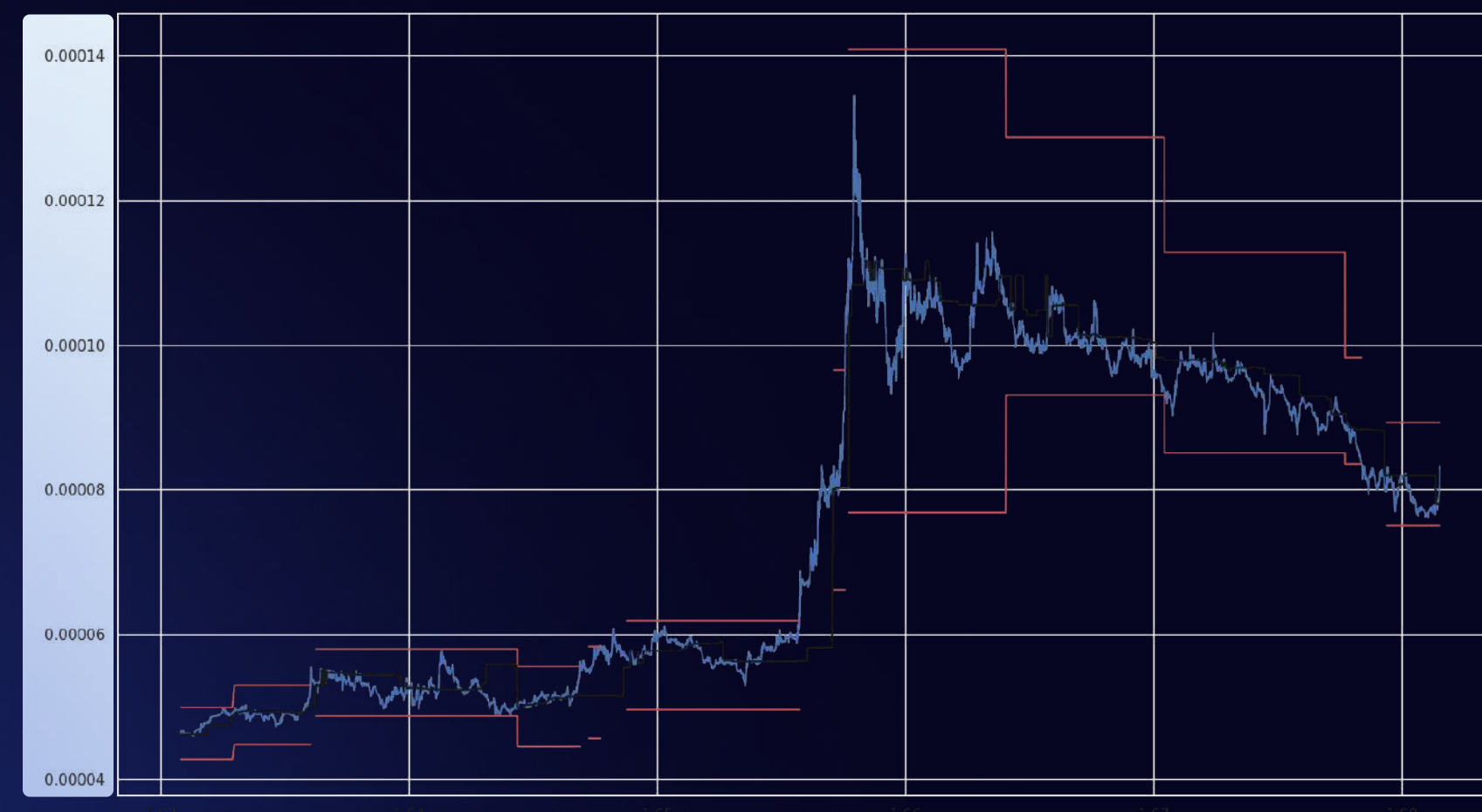


# Proposal

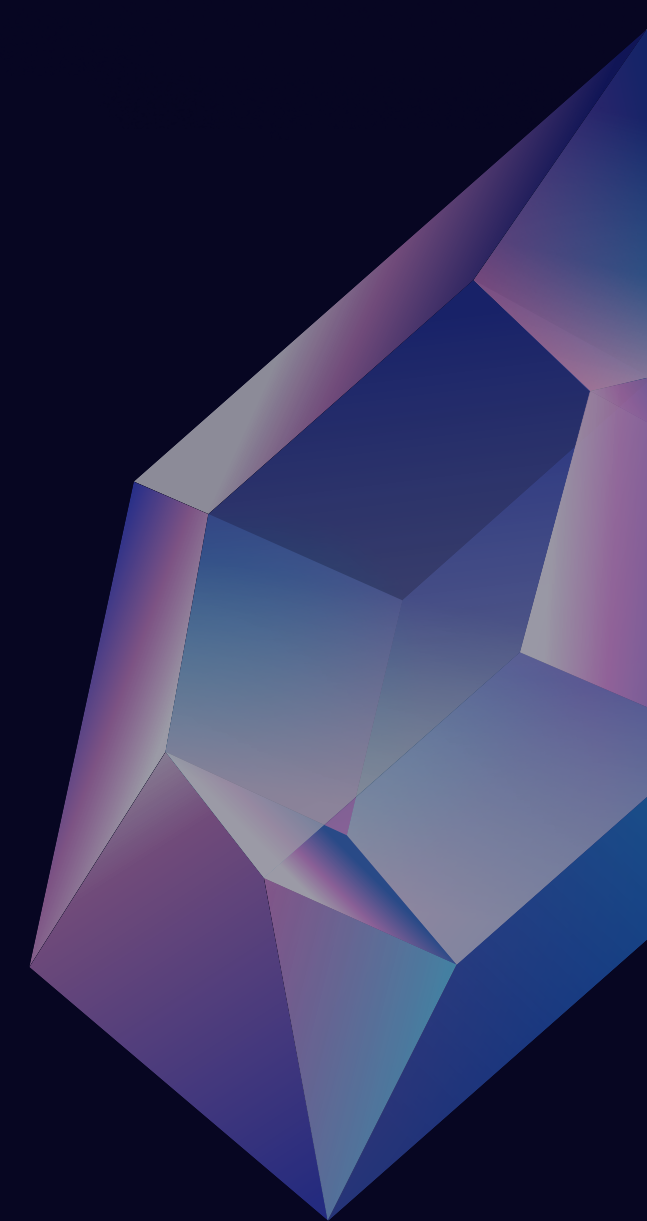
The current biggest LP positions in the Uniswap v3 pool, even though very wide, have great return from the trading fees.

We propose the DAO to use a part of the treasury to delegate liquidity to Range Protocol's vault for GRT ETH 30 bps Uniswap v3 pool. Liquidity will be managed by our strategic partner 'Tokka Labs'. This will significantly optimize the defi liquidity for GRT token.

The benchmark strategy yields **108% APY** in the backtest result for the past 2 months and provides liquidity over a narrow price band. Sharing a glimpse of the backtest result.



Further discussions can be carried over DAO forums.







[https://twitter.com/Range\\_Protocol](https://twitter.com/Range_Protocol)



[discord.gg/U7hHGzTdEA](https://discord.gg/U7hHGzTdEA)