



RGB smart contracts

INTRO & FAQ

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DISCLAIMER!

- High toxicity content
- Cypherporn, cryptonudity
- 1984+
- Not suitable for pregnant children
- May contain traces of black magic code



Agenda

- Why RGB?
- What is RGB?
- What RGB NOT?
- What is there to RGB?
- WHEN RGB?
- Who RGB?
- How to support RGB?

Part I

Why RGB?

Digital smart contracts

Expectation

- I am sovereign
- My data - my Citadel
- My peers = my tribe = my fam



Reality

- Govern me harder Daddy
- We got HREKT (Hacked and REKT)
- Chainanalysis is my best friend



Decentralized financial revolution (DeFi)

Expectation

- We will kill VISA/MasterCard
- We will kill banks
- We will kill centralized exchanges
- We will create trustless synthetic assets
- We use tokens for creating incentives

Reality

- **No scalability:** cryptokitties kill it all
- **No security:** constant hacks
- **Trust to developers:** exit scams are common
- **Extremely high transaction cost**
- **Tokenomics of speculations**

But why should we even care?

There is
a need
for
DeFi

The background features a dark, abstract pattern of overlapping diagonal lines in shades of purple, blue, and red, creating a digital or futuristic feel. In the center, there is a circular logo composed of a grid of small pixels. The letters 'DeFi' are written in white, bold, sans-serif font across the center of the circle. The 'F' has a small black dot above it. The overall composition suggests a theme of technology, finance, and innovation.

- **Trading**: DEXes. Curve-based liquidity.
- **Lending**: people need liquidity
- **NFT**: let creators earn money
- **DAO**: allow legal arbitrage

What is needed?

- Smart-contract system
- Private but verifiable
- Resistant to censorship but open for fair participation
- Scalable but without bloating the blockchain
- Fast but able to process big masses of data



RGB

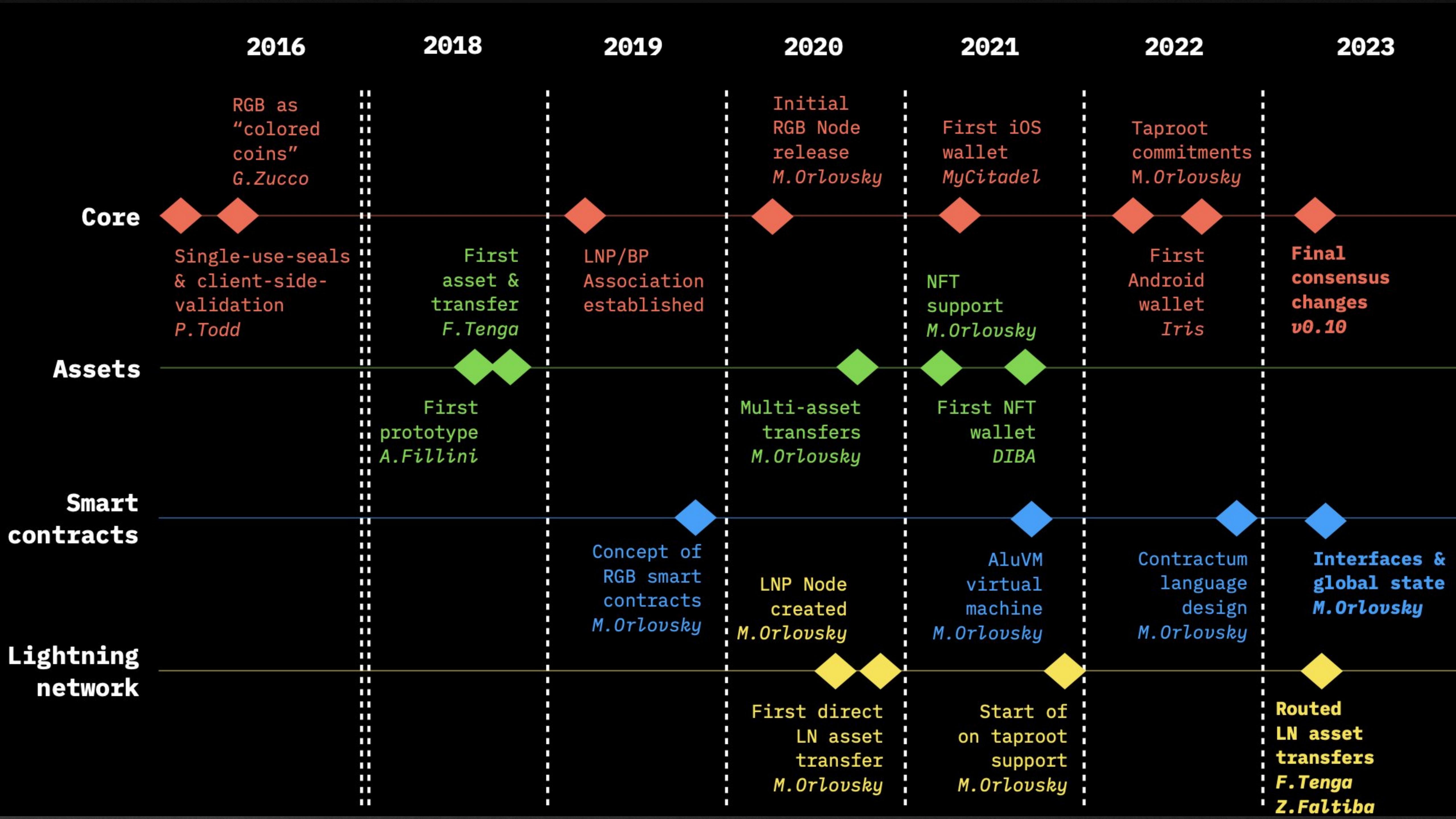


Part II

What is RGB?



RGB is scalable Turing-complete smart contracts for Bitcoin,
able to run on Lightning Network
zk-based, with strong privacy



RGB IS:



- smart-contract system*
- DAG
- No native token
- Private
- The only tech that works over Lightning Network
- Blockchain agnostic

***Smart contract** - is the way to enforce the fulfillment of a certain agreement between humans without an external centralized agency (military, government, court etc)

RGB paradigms:

- **Client-side validation** - all the data is kept outside of the bitcoin transactions, i.e. bitcoin blockchain or lightning channel state
- **Single-use seals** - abstract mechanism to prevent double-spends
- **Cryptographic commitments**
- **Strict encoding**

<https://github.com/LNP-BP/rust-lnpbp/tree/refactor-structure/src/paradigms>

RGB: smart contracts using client-side validation



Part III

What RGB is NOT?

RGB is NOT:

- blockchain/sidechain/[whatever]chain
- ZK-rollup
- token protocol
- network

Sounds like Black Magic

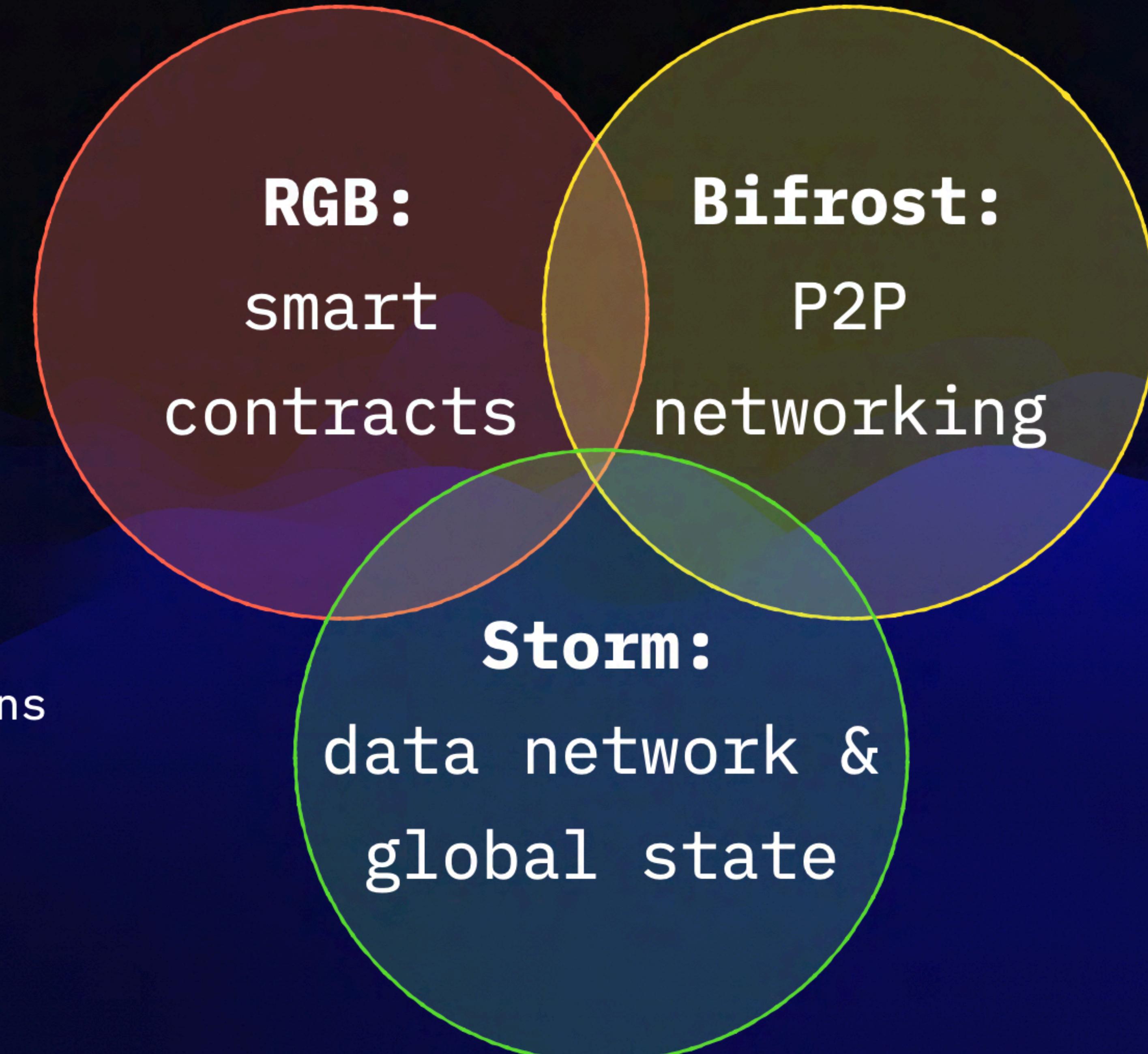


Part IV

How to #BiFi with RGB?

LNP/BP for Bitcoin Finance

- Assets
- DEX
- Liquidity pools
- AMM & algorithmic stable coins
- futures/options



LNP/BP Nodes



RGB Node

Smart contract validation & state RPC



BP Node

Bitcoin indexing node (faster & more efficient than Electrum server)



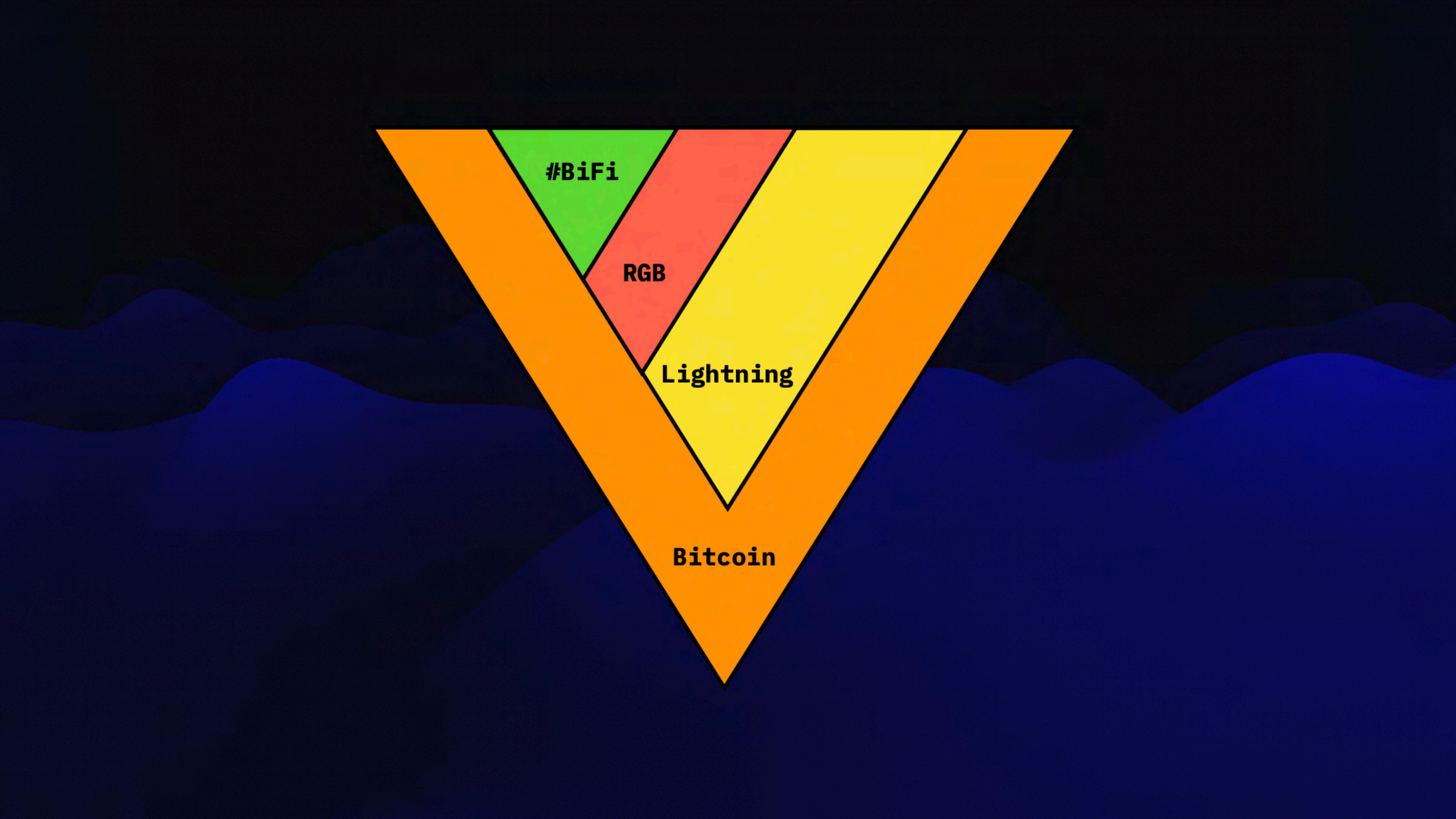
LNP Node

Lightning node supporting RGB, Taproot, DEX, BiFi



Storm Node

Decentralized storage, messaging & search



#BiFi

RGB

Lightning

Bitcoin

**Can I do with anything beyond
BiFi with RGB?**

What can I do with RGB?

- Fungible assets & securities (options, futures)
 - centrally or federation-issued
 - issued anonymously or publicly
 - with possible secondary issuance, demurrage, inflation
- NFTs (game skins, collectibles, digital art etc)
- Bearer rights (voting etc)
- AMMs, liquidity pools, DEXs
- DAOs
- Digital Identities, roaming profiles & key management

Part V

WEN RGB?



**RGB protocol was released
on the 13th of June 2022**

(protocol freeze, final public preview, v0.8)

RGB v0.10 release progress

	Readiness	Released	Presentation
Consensus (Core lib)	✓	9 Feb	Part 1
Standard library	✓	9-10 March	Part 2
Wallet library	✓	22 March	Part 3
Command-line tool	✓	10 April	Part 4

Part VI

Who RGB?

The largest Bitcoin tech non-profit in Switzerland

A screenshot of a GitHub repository page for "LNP/BP Association". The page has a dark theme.

LNP/BP Association
Non-profit supervising layer 2 & 3 protocols on Bitcoin & Lightning Network
Bitcoin <https://lnp-bp.org> [@lnp_bp](https://twitter.com/lnp_bp) info@lnp-bp.org

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[.github/profile/README.md](#)

LNP/BP^[1] Standards Association

We are Swiss non-profit supervising layer 2 & 3 open standards and protocols for Bitcoin & Lightning Network. We are creators of L2 and L3 protocols like RGB, Bifrost, Storm, Prometheus, Kaleidoscope and active builders of #BiFi (bitcoin finance) ecosystem on Lightning. We manage set of [LNPBP standards](#) and their opensource [reference implementations](#) under permissive MIT & Apache2 licenses. The Association was founded by [@dr-orlovsky](#) and [@giacomozucco](#) in 2019. You can read more about us on our website, lnp-bp.org and follow us on Twitter [@lnpbp](#).

LNPBP Standards

The current list of standard can be found [here](#). You can:

- submit a new standard proposal
- discuss preliminary ideas about new standards
- follow announcements about standard releases
- write about your implementation of one of the standards
- ask questions
- peer review & audit existing standards

People

[View all](#)

[Invite someone](#)

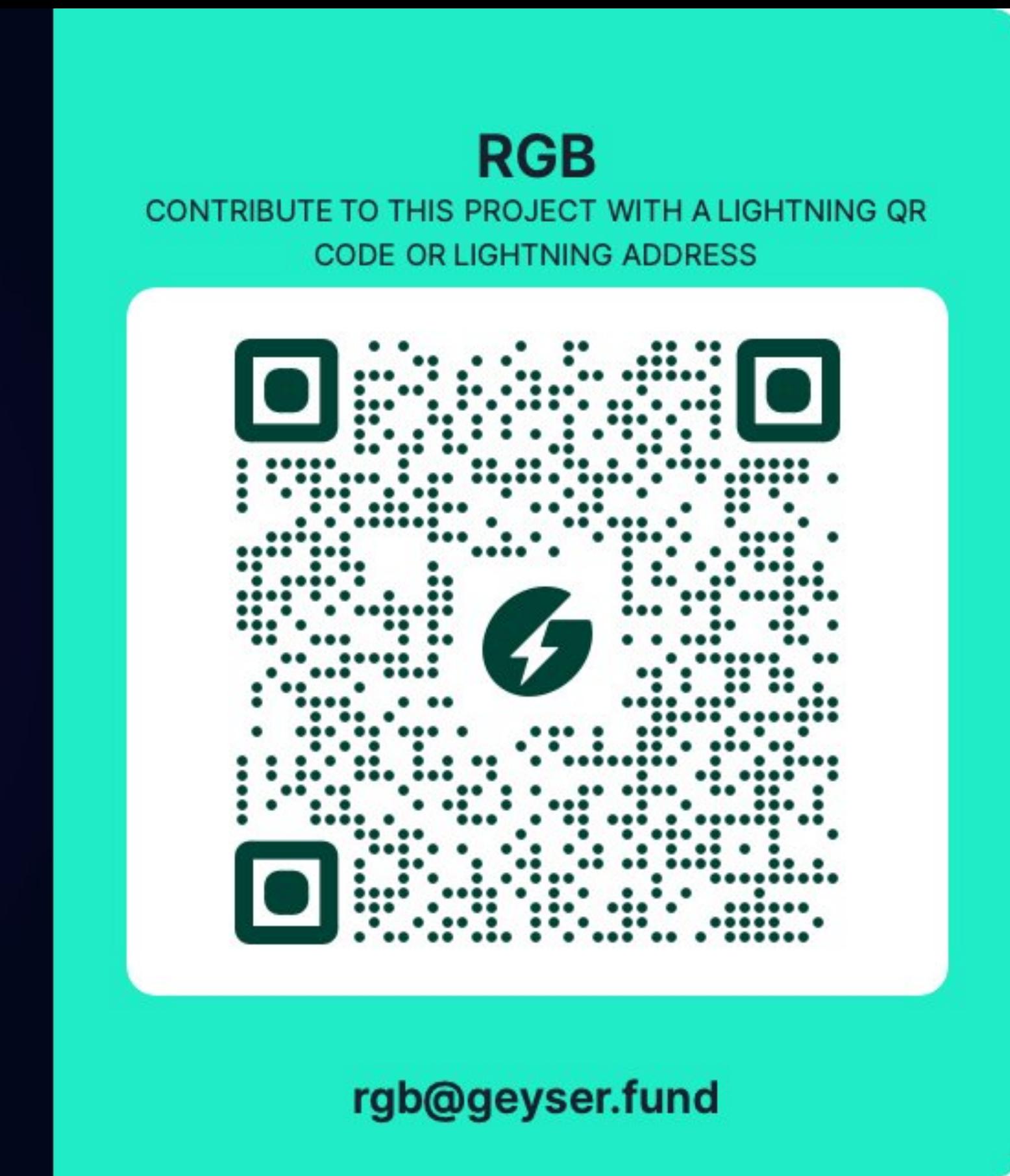
Top languages

- Rust
- C
- Python
- Swift
- Dockerfile

Most used topics

- Manage
- bitcoin
- client-side-validation
- Inp-bp
- lightning-network
- distributed-systems

Support & donate



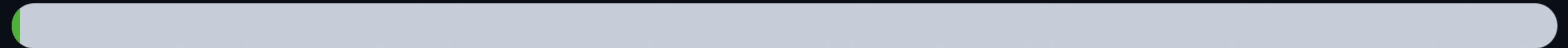
Support & donate

<https://www.lnp-bp.org>

Support LNP/BP and RGB

currently active!

300,000.00 USD Dynamic Softcap Goal ⓘ



1,687.21 USD <i>Raised</i>	0.56% <i>Of Goal</i>	14 <i>Contributors</i>
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[Contribute](#)

For three years [LNP/BP Standards Association](#) develops standards, protocols and reference implementations for application layers on top of Bitcoin and Lightning network, ensuring and promoting values of censorship resistance and privacy.

So far, we have developed and contributed to the development of the following technologies:

- RGB: scalable and confidential smart contracts for bitcoin and Lightning Network
- LNP Node: pure rust re-implementation of Lightning node, focusing on simple extensibility and able to run L3 applications
- Descriptor wallet library: a bitcoin wallet developer SDK supporting Taproot, miniscript, PSBTs, descriptors, RGB and lightning network
- Taproot implementation in rust-bitcoin; maintenance of rust-bitcoin library for three years (leading contributors)

Contribute

Plebs Any amount

Support development of censorship-resistant & privacy technologies in bitcoin and lightning ecosystem with any amount you can afford.

NB: If you are donating 1000 USD or more please check specific donation options providing more benefits depending on the size of donation.



Driving RGB adoption



Pandora Prime: the #BiFi company

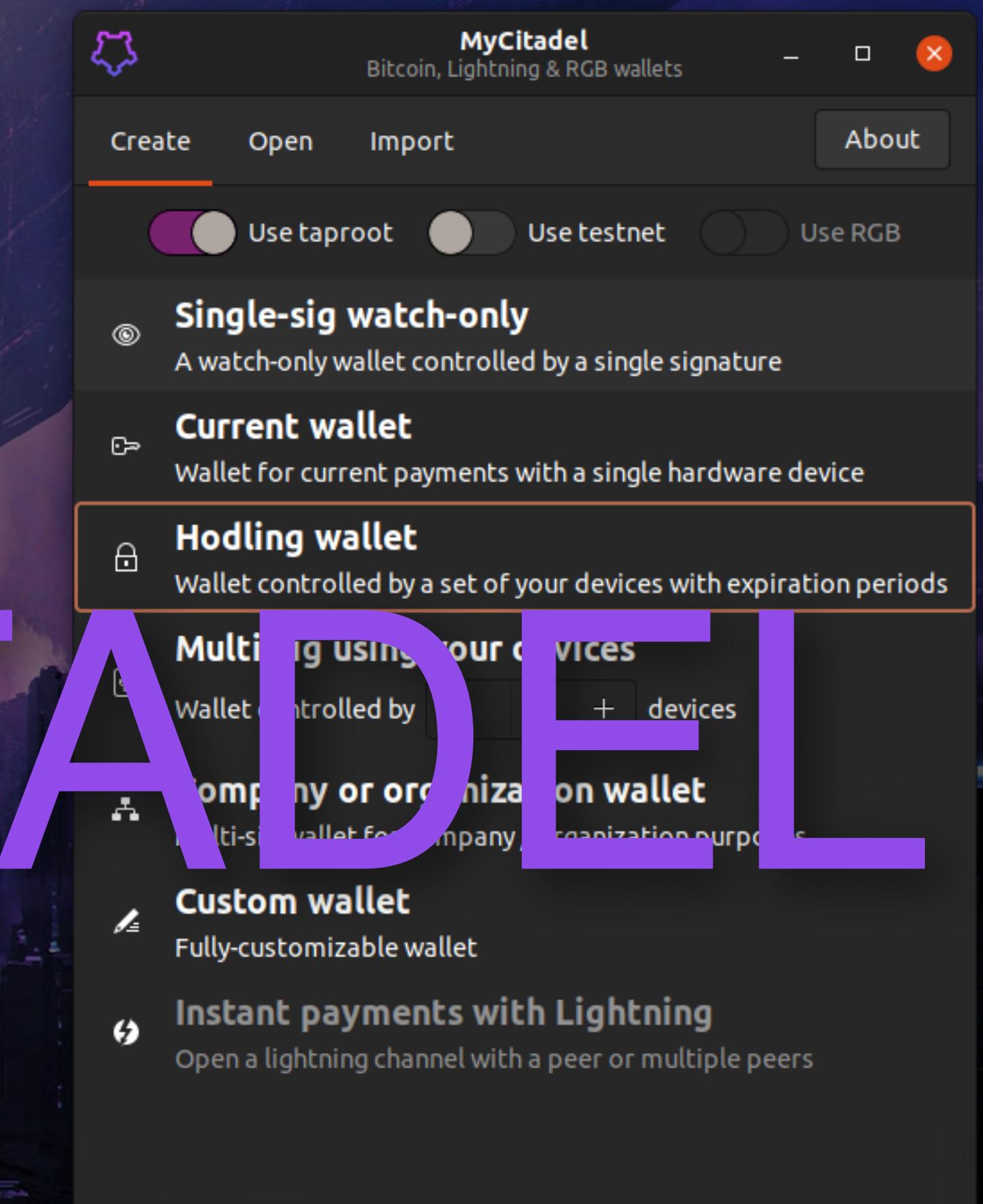
Layered tech, layered business

**Products
& services**

Pandora

**Open-source standards
& program libraries**

LNP/BP Standards Association



MYCITADEL

Ultimate digital privacy



RGB-wrapped bitcoin (BTCN)

- Decentralized issuance (!)
- Programmability for Bitcoin
- Cash-level of privacy
- Foundation for building #BiFi products:
 - DEX
 - AMM markets
 - Algorithmic coins



Stablecoins

CHFN

- Working on lightning network
- VISA/MC level of transaction throughput
- Confidential as cash ("digital cash")



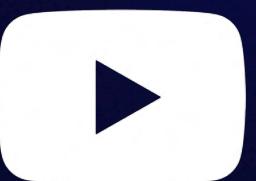
Info-resources



- www.rgbfaq.com
- www.rgb.tech



- LNP/BP Standards Association
https://twitter.com/lnp_bp
- RGB Community
<https://twitter.com/i/communities/1585365616743022595>



- LNP/BP Standards YouTube channel
<http://youtube.com/c/LNPBP>



- RGB Telegram chat
<https://t.me/rgbtelegram>
- LNP/BP Telegram channel
https://t.me/lnp_bp





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*I identify as Dolores the Queen of Geeks