

Blockchains Lesen und Verstehen

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Cryptolight GmbH

Machine Learning and Data Analytics, Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)



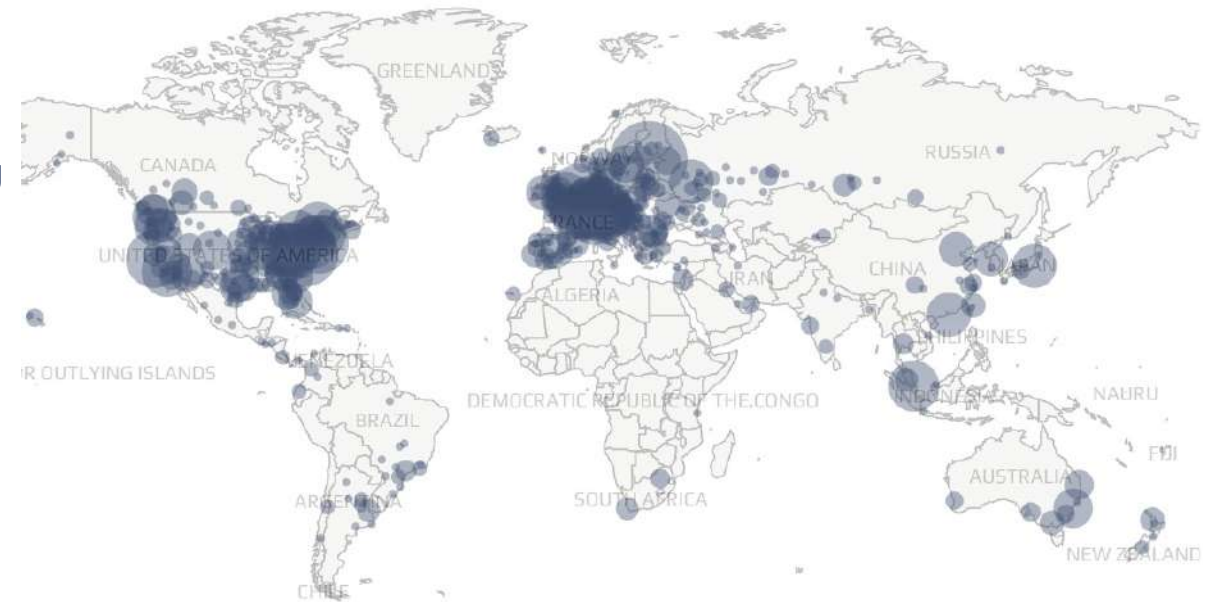
Gefördert durch:



aufgrund eines Beschlusses
des Deutschen Bundestages

Interesse an Blockchains

- **Deutschland**
10% aller Internetnutzer halten eine Kryptowährung
- **Blockchain-Kunst Verkaufsvolumen**
Anstieg von \$100 Mio. (01/21) auf \$12 Mrd. (12/21)
- **Weltweite Ausgaben für Blockchain-Lösungen**
Anstieg von \$0,95 Mrd. (2017) auf \$19 Mrd. (2024)



Herkömmliche Berufe müssen damit arbeiten können

Insbesondere die
klassischen Finanz-Berufe
und Berufe deren Zukunft
von Blockchains geprägt
sein wird

Steuerberater

Wirtschaftsprüfer, Auditoren

Buchhalter

Finanzbeamte

Rechtsanwälte, Gerichtsberufe

Versicherungsberufe

Hohe technische Komplexität

- **Entwickelt von Informatikern und Kryptowissenschaftlern**
- **Expertenwissen notwendig für die Nutzung der Technologie**
- **Hohe Heterogenität innerhalb der Blockchain-Welt (> 5000 aktive Chains)**



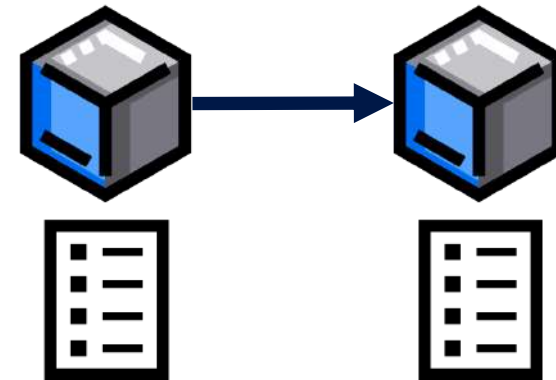
Jede Blockchain unterscheidet sich

- **Adressformat**
- **Transaktionssystem**
- **Verifikation (Hashes)**
- **Speichersystem**
- **Virtuelle Maschine**
- **Smart Contract (Sprache)**

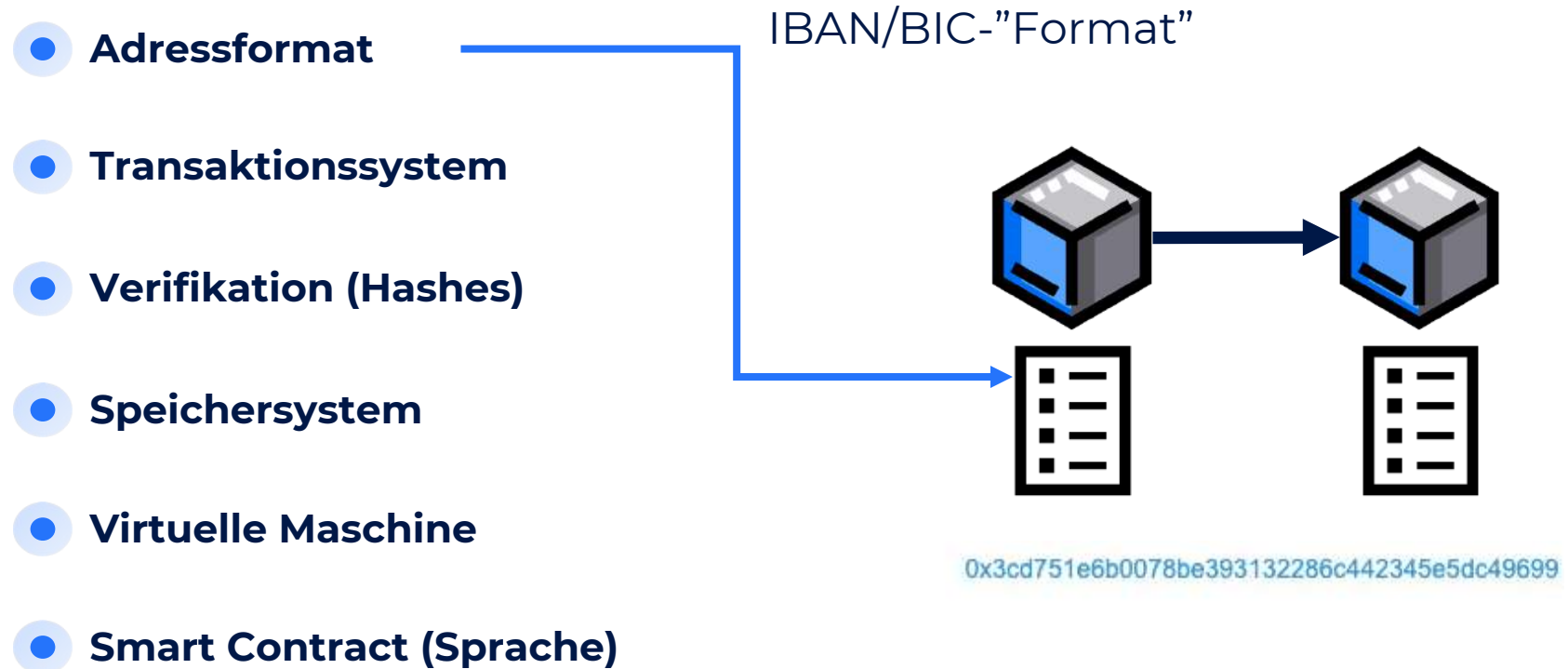


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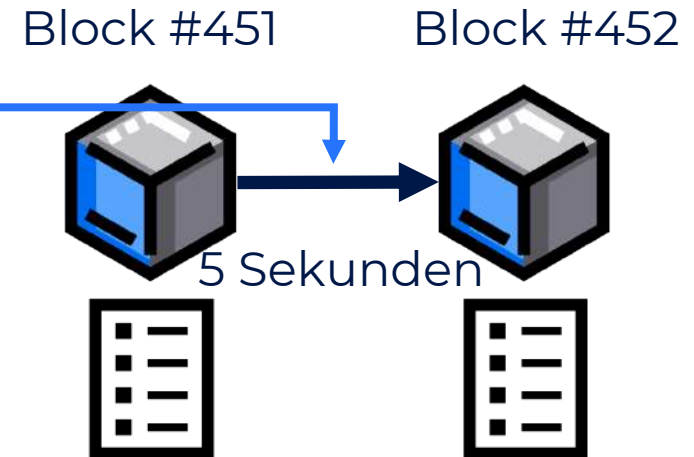


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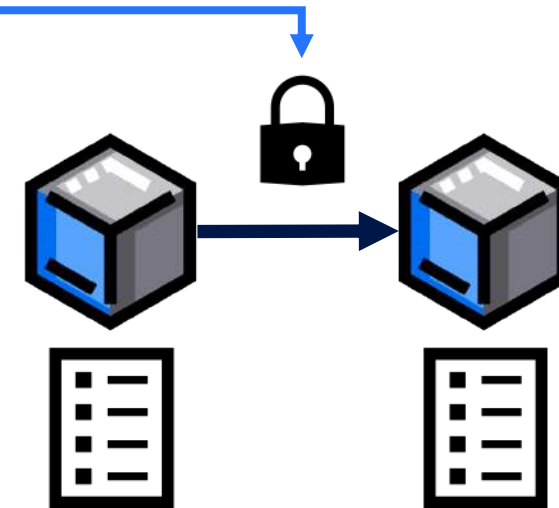
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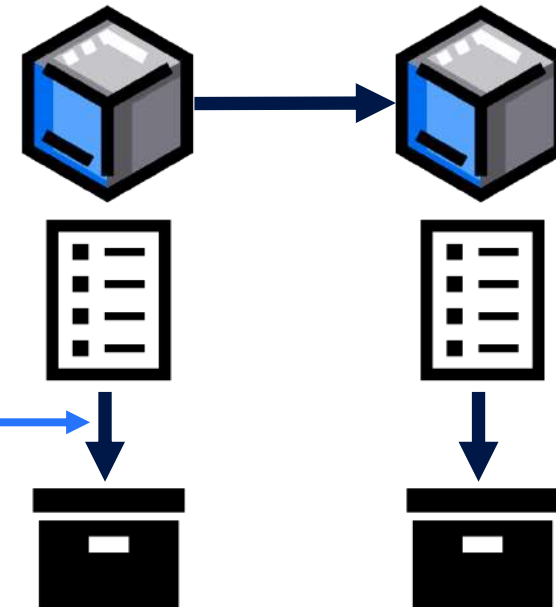
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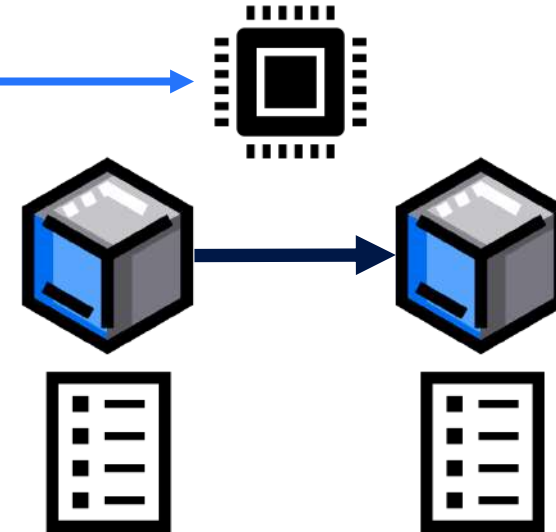
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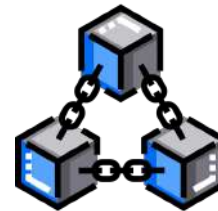
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Anwender

Blockchains lesen



Blockchain-Nodes

Benötigt technische Detailexpertise und Software + Hardware



Block-Explorer

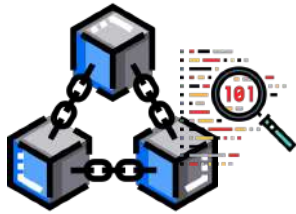
Benötigt technische Fachexpertise



Blockchain Datendienstleister

Benötigt (keine) technische Expertise

Blockchains lesen



Fullnodes und Lightnodes

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Block-Explorer

Benötigt technische Fachexpertise



Blockchain Datendienstleister

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Blockchain.com



Blockchains lesen

Block-Explorer



etherscan.io/tx/0x90b1bdba53caefa086f9a38953ba5287fb5b364af03874277d2c11c3c8f12622

Etherscan

Eth: \$1,062.53 (-10.31%) | 51 Gwei

Home Blockchain Tokens Resources More Sign In

Transaction Details

Buy Exchange Earn Gaming

Overview State Comments

Transaction Hash: 0x90b1bdba53caefa086f9a38953ba5287fb5b364af03874277d2c11c3c8f12622

Status: Success

Block: 14967046 7 Block Confirmations

Timestamp: 1 min ago (Jun-15-2022 10:39:35 AM +UTC) Confirmed within 32 secs

From: 0xca69f78f95972a947497971c9e97d5e44084e7

To: 0x524fd27cef9e48ca9ad24ddcc2a25e4caaa609e6

Value: 2.211 Ether (\$2,349.25)

Transaction Fee: 0.0012181218 Ether (\$1.29)

Gas Price: 0.000000580058 Ether (58.0058 Gwei)

Gas Limit & Usage by Txn: 21,000 | 21,000 (100%)

Gas Fees: Base: 56.100721025 Gwei

Others: Txn Type: 0 (Legacy) Nonce: 12 Position: 21

Input Data: 0x

Click to see Less

Private Note: To access the Private Note feature, you must be Logged In

A transaction is a cryptographically signed instruction from an account that changes the state of the blockchain. Block explorers track the details of all transactions in the network. Learn more about transactions in our Knowledge Base.

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Eindeutige ID

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Sender-Konto

To: 0x524fd27cef9e48ca9ad24dcc2a26e4caea609e6

Value: 2.211 Ether (\$2,349.25)

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Empfänger-Konto

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Blockchains erleben



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**Visualisieren
und
Explorieren**

Dashboards

coinmarketcap.com
blockchain.com/explorer

Visualisierungen

Kryptowährungen explorieren

binance.com
kraken.com
bsdex.de

Non-Fungible Token (NFTs)

opensea.com
rarible.com

Musikalische Visualisierung

www.bitlisten.com

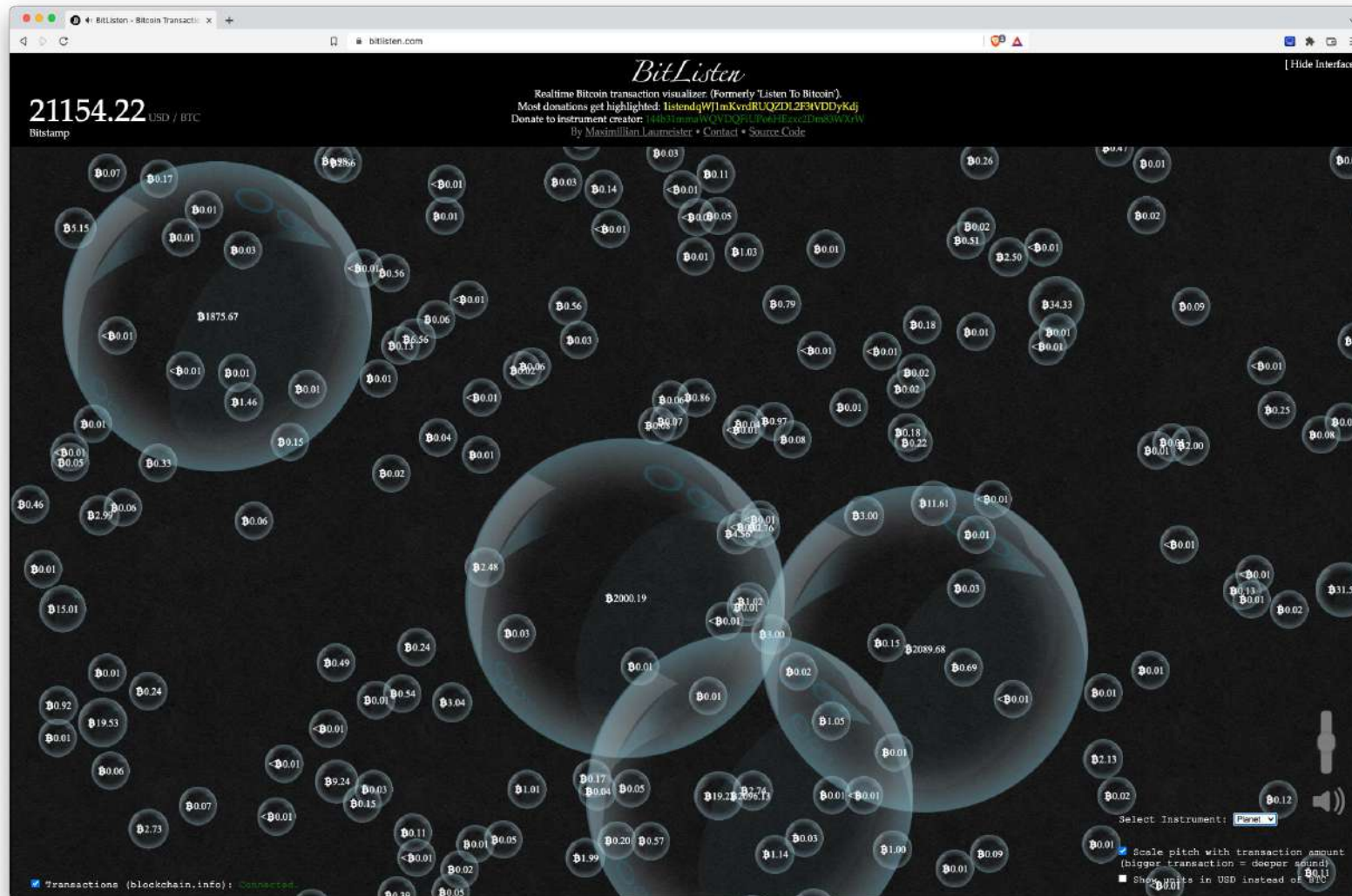
Blockchain Tetris

bits.monospace.live

Geographische Verortung

blocks.wizb.it

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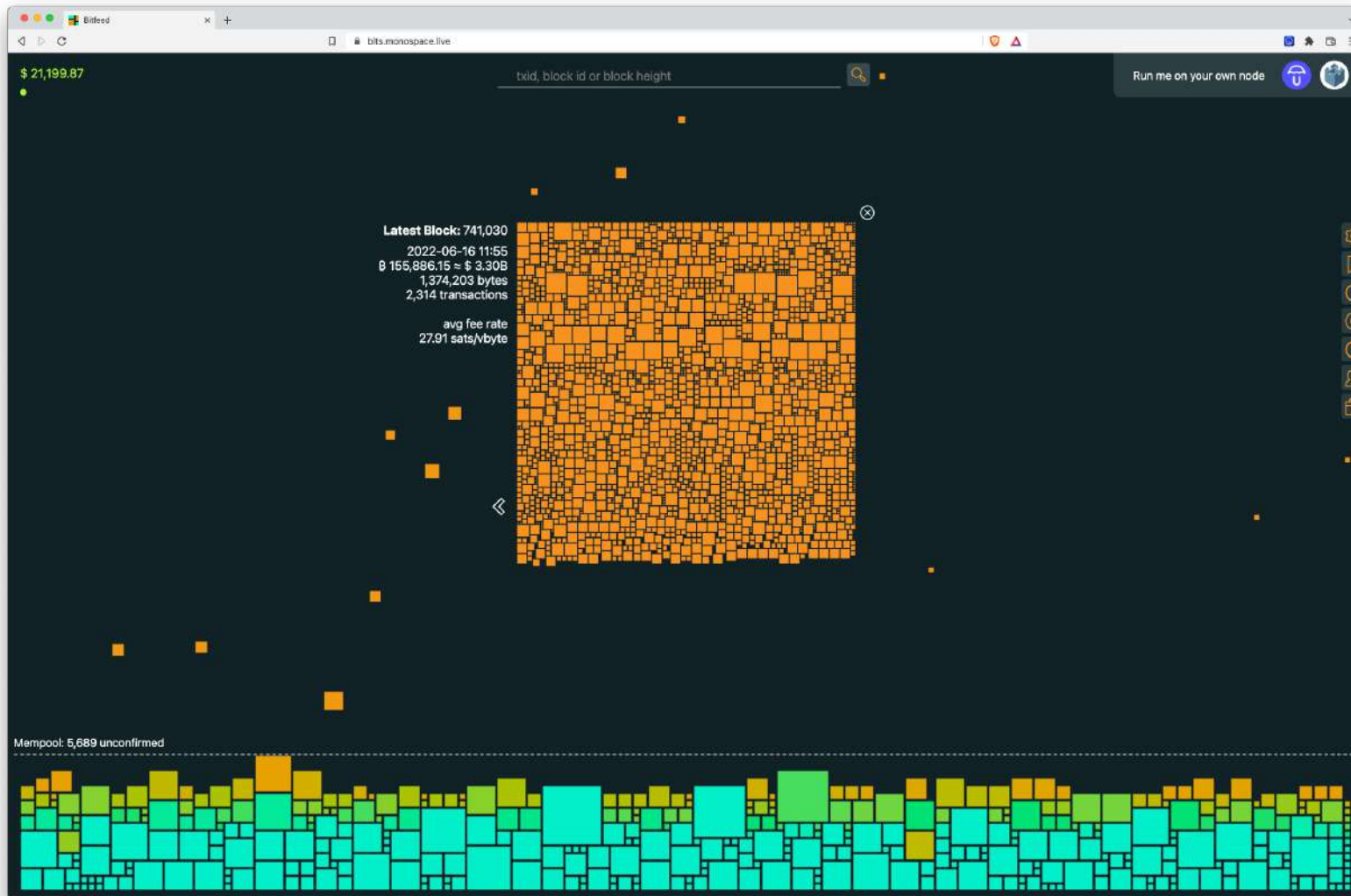


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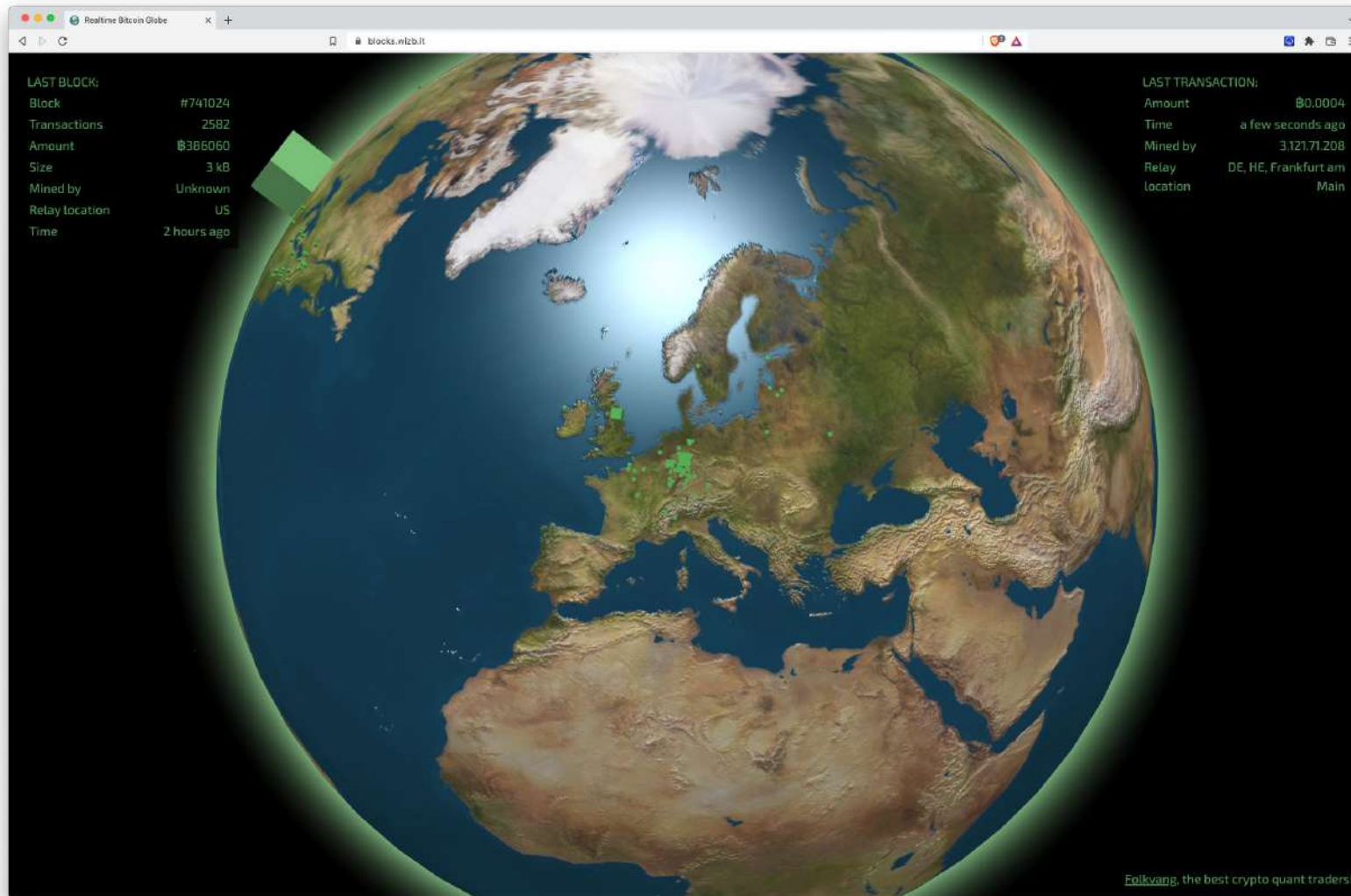


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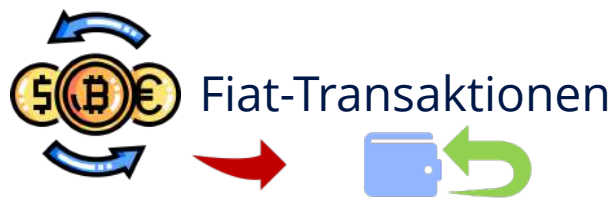


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Anwendungsbezug im Steuerrecht



Recap

- **5000+ Blockchains, unmöglich alle zu verstehen**
- **Transaktionen aber in allen Chains mit gleichen Basistechniken**
- **Block-Explorer immernoch Stand der Technik zum Einsehen der TXs, User Experience vergleichbar mit Telefonbüchern**
- **Weiterentwicklungen in den nächsten Jahren, Cryptolight arbeitet an einem Abstraktionslayer**
- **Die beste Möglichkeit mehr über Blockchains zu lernen ist, sie selbst auszuprobieren und Erfahrungen zu sammeln, Kryptowährungen sind ideale Spielwiese**

Vielen Dank für Ihre Aufmerksamkeit

Kontakt: stefan@cryptolight.io



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Bundesministerium
für Wirtschaft
und Klimaschutz



Zusammen.
Zukunft.
Gestalten.

aufgrund eines Beschlusses
des Deutschen Bundestages