

**THE LIGHTNING NETWORK:
CAPABILITIES AND LIMITATIONS FOR
BLOCKCHAIN SCALABILITY**

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The Bitcoin blockchain does not scale: it supports only a few (around seven) transactions per second. The Lightning Network is a payment system and is one of the most developed solution aiming to enable fast, high-rate bitcoin payments. The talk will illustrate the main principles and will explain the functioning of the Lightning Network. In addition, it will present performance results obtained by simulations on the Lightning Network, highlighting its main capabilities and limitations.