

CERN Colloquium

SPEAKER: Christian Cachin

TITLE: Distributing Trust with Blockchains

DATE: 5 Jul 2018, 16:30

PLACE: 500-1-001 - Main Auditorium

ABSTRACT

Cryptocurrencies on blockchains are worth billions today. Blockchain is promised to secure exchanges among unknown, mistrusting parties. Companies are struggling to explore new opportunities with the crypto-technology. What stands behind this hype? A blockchain is simply a public ledger for recording transactions, maintained by many nodes without central authority through a distributed cryptographic protocol. All nodes validate the information to be appended to the blockchain, and a cryptographic consensus protocol ensures that the nodes agree on a unique order in which entries are appended. This talk will explore the cryptography and consensus mechanisms for blockchains. Public blockchains and cryptocurrencies like Bitcoin or Ethereum operate in a completely decentralized way. Consortium blockchains, on the other hand, are run by an a-priori established group. The presentation will also cover Hyperledger Fabric, a modular and extensible blockchain platform that is developed open-source under the Hyperledger Project, with key contributions from IBM Research - Zurich.

Organised by: W. Lerche/TH-SP...... Tea and coffee will be served at

16h00