

# Vortrag im Rahmen des Besetzungsverfahrens der Laufbahnstelle „Kryptographie“

Montag 16. November 2020, 16:00 Uhr

**Dr. Julian Loss** (University of Maryland)

Lehrevortrag „Introduction to Asymmetric Cryptography“ (20 Minuten) und anschließend der Forschungsvortrag mit dem Titel:

## ***Foundations of Blockchain Systems***

### **Abstract:**

One of the most successful applications of modern cryptography has been its use in electronic and digital payment systems. In traditional systems, a trusted authority handles all payments (e.g., a bank or a credit card company). More recently, blockchain systems have emerged as a trust-free and increasingly popular alternative.

In a blockchain system, users jointly emulate the trusted authority by running a distributed protocol to agree on the transaction history of users (i.e., the blockchain). Making blockchain systems a secure and scalable environment poses many new and fascinating challenges that require solutions from both cryptography and distributed computing. In my talk, I will explain the different areas of my research and their importance as components that make up a blockchain system. For each of these areas, I will also list some of the open questions that I plan to work on in the near future.

**Aufgrund der Umstände (COVID 19) finden der öffentliche Vortrag und die anschließende Diskussion per Stream statt.**

Bei Interesse melden Sie sich bitte per E-Mail an [informatik@uibk.ac.at](mailto:informatik@uibk.ac.at)