



De Cifris Schola Latina



DIPARTIMENTO
DI INFORMATICA

SAPIENZA
UNIVERSITÀ DI ROMA



Monday 12th – Tuesday 13th October 2020 – at 11.00

Virtual conference on Google Meet

<https://meet.google.com/iij-ftp-fxxr>

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Leakage-Resilient Non-Malleable Secret Sharing

Abstract: Secret Sharing enables a dealer to split a secret into a set of shares in such a way that certain authorized subsets of share holders can reconstruct the secret, whereas all unauthorized subsets cannot learn any information about the secret. Typical applications include data storage, threshold cryptography and multi-party computation, and sometimes additional security requirements are needed. We focus on leakage-resilient non-malleability, achieved when the scheme remains secure even in the presence of leakage and tampering attacks. The first part of the seminar is dedicated to an introduction to secret sharing with all the necessary security notions, including the ones of leakage-resilience and non-malleability. Here, we also show some examples, applications and some general results. In the second part, we go into detail and show the current state of the art of leakage-resilient non-malleable secret sharing, along with some recent constructions.

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CONTATTI

Iniziativa De Componendis Cifris

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