

CRYPTOGRAPHY

DOREEN RIEPEL

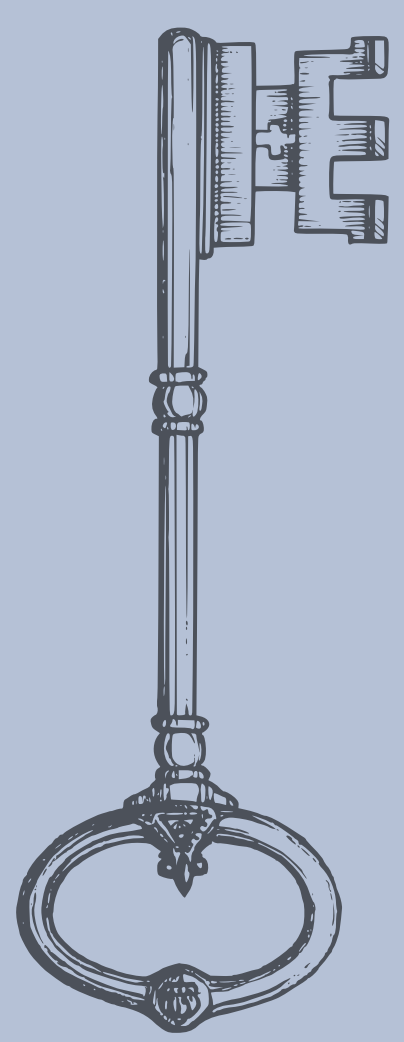
PUBLIC-KEY ENCRYPTION

$$\begin{array}{l}
 \text{Alice} \\
 a \leftarrow \mathbb{Z}_p \\
 A := g^a \\
 \text{key} = A^b
 \end{array}
 \xrightarrow[A]{B}
 \begin{array}{l}
 \text{Bob} \\
 b \leftarrow \mathbb{Z}_p \\
 B := g^b \\
 \text{key} = B^a
 \end{array}$$

PROVABLE SECURITY

SECURITY GAMES

AUTHENTICATED KEY EXCHANGE

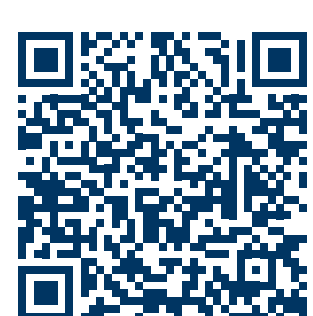


E A D G T U G E W T K V A E E W T K V A E A D G T U

WOMEN IN IT SECURITY

Doreen Riepel is a PhD student at the Chair for Cryptography at Ruhr-Universität Bochum (RUB), within the Cluster of Excellence CASA.

Her research focuses on the design and analysis of cryptographic protocols. This includes, in particular, interactive protocols for cryptographic key exchange and providing mathematical proofs. In 2019, she completed her master's degree in IT security at RUB.



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