

PET: Privacy-Enhancing Technologies

Andreas Peter (UT) & Zeki Erkin (TUD)

- Aim: Study information privacy concepts in context
- Contents: Privacy in the context of
 - Communication; Identity Management; Statistics; Electronic Voting; Cloud Computing; Surveillance; ...
 - Example PETs: mix networks; anonymous credentials; differential privacy; homomorphic encryption; ...
- Exam: 60% written exam + 40% assignments
- Period: Q4
- Prerequisite: Security and Cryptography (Q1)

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50 % PETs used in practice

- Onion Routing
(→ TOR)
- Anonymous Credentials
(→ idemix)
- Anonymity concepts
(→ k-anonymity)

50 % advanced PETs

- Homomorphic Encryption
(→ Private Face Recognition)
- Secure Multiparty Computation
(→ Private Recommendations)
- Differential Privacy
(→ Private Smart Metering)

+ Invited mini-lecture by KPMG