

## **General information**

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| Area of interest |  | Choose V or N |
|------------------|--|---------------|
| 0                | Eunctional encryption and reduction of leakage (e.g., anonymization or obfuscation)  | N             |
| 0                | Ultra-lightweight cryptology and ultra-high-speed cryptographic algorithms including quantum cryptography  | Y             |
| 0                | Physical cryptanalysis, including tampering, side channel, faults injection attacks, and security of tools for good software implementation and validation practices | Y             |
| 0                | Authenticated encrypted token research for mobile payment solution   | N             |
| 0                | Innovative cryptographic primitives and complementary non-cryptographic privacy-preserving mechanisms to enforce privacy   | N             |
| 0                | New techniques, such as quantum safe cryptography, which are secure from quantum computers   | N             |
| 0                | Quantum key distribution   | N             |
| 0                | Automated proof techniques for cryptographic protocols   | N             |



## **Competencies**

- Design and Cryptanalysis of Symmetric-Key Primitives
- Proven track record in the design and analysis of lightweight schemes
- Development and Implementation of Real-Life software and hardware designs
- Current participation: PQCRYPTO (ICT-645622) and COST action CRYPTACUS (IC 1403)
  - Past participation in NESSIE (IST-1999-12324), ECRYPT (IST-2002-507932), ECRYPT2 (ICT-2007-216676)
- Speaking both "Crypto" and "Security"
- Understanding "Market Needs" and Engineering aspects, as well as future directions in computing
- [Team includes Prof. Shay Gueron (Math dept. + Intel Corp.)]