

## Documents

Nagy, N., Nagy, M.

**Quantum key distribution with pair-wise correlation**

(2018) *2017 9th IEEE-GCC Conference and Exhibition, GCCCE 2017*, art. no. 8448176, .

**Abstract**

Current cyber security solutions rely on ever increasing secret keys. The alternative solution to this trend is to use quantum security schemes. A quantum security scheme insures that there is no mathematical computation that allows for the computation of the key, as it is simply random. The present paper describes a quantum key distribution scheme that exploits correlation between pairs of bits. This new feature has the added quality that the intruder-Eve can be detected even on a qubit that Eve has not tampered with. The security of the protocol can be made arbitrarily high by increasing the safety parameter. © 2017 IEEE.

2-s2.0-85053893171

**Document Type:** Conference Paper

**Publication Stage:** Final

**Source:** Scopus