**Simple Questions/Answers about the unconditionally secure key exchange via the Kirchhoff-law-Johnson-Noise (KLJN) method**

**What is KLJN:** It is a wire-based alternative of quantum-key-distribution (QKD) to exchange a secure key between two communicating parties in an unconditionally secure way.

**Does KLJN utilize the laws of quantum physics like QKD?** No, KLJN utilizes a well-known law of classical physics: *The impossibility to build a perpetual motion machine* (of the second kind. The Second Law of Thermodynamics).

**How difficult is to crack the security of the ideal KLJN?** ***As difficult as to build a perpetual motion machine.***

**Is KLJN communicating secure messages?** No, KLJN instead generates and shares a secure key between the two parties. This secure key then can be used by any cipher software to execute an unconditionally secure communication via classical channels, such as the internet, wireless channels, telephone, etc.

**Can KLJN be used for other purposes?** Because KLJN can be integrated on chips, it can be used to build *non-counterfeitable* hardware keys to secure hardware, data, algorithm, etc, in instruments and computers, or to access money.

**What are the advantages of KLJN compared to QKD?**

- It can be integrated on chips and be placed in computers, instruments, access cards, credit cards, debit cards, computer games.
- Wire based (advantage in a chip).
- About 1000 times cheaper (considering current quantum communicator prices).
- Very robust: shock, dust and aging resistant.
- Maintenance-free.
- Low-power realization is possible.

**For more, see the Full Text PDF here:**
http://www.degruyter.com/view/j/mms.2013.20.issue-1/mms-2013-0001/mms-2013-0001.xml