

## Application of Compressed Sensing Method for Compression of Quantum Data

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**Abstract :** Current quantum key distribution systems (QKD) offer low bit rate of up to single MHz. Compared to conventional optical fiber links with multiple GHz bitrates, parameters of recent QKD systems are significantly lower. In the article we present the conception of application of the Compressed Sensing method for compression of quantum information. The compression methodology as well as the signal reconstruction method and initial results of improving the throughput of quantum information link are presented.

**Keywords :** quantum key distribution systems, fiber optic system, compressed sensing

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