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## Checking noise correlations for safer two-way quantum key distribution (Article)

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### Abstract

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We check for noise correlations between forward and backward paths in two-way quantum key distribution, which leads to reduced potentialities for an eavesdropper since she can only hide herself behind uncorrelated (natural) noise. The security enhancement is evaluated through the ratio of eavesdropper's information and legitimate users' information achievable against the most relevant individual attacks. © 2013 Springer Science+Business Media New York.

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[Entropy and other measures of information](#) [Quantum cryptography](#) [Quantum measurement theory](#) [Two-way QKD](#)

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