

# Modeling QKD with CW-pumped entangled-photon sources

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Difference in pulsed and continuous-wave (CW) pumped quantum key distribution (QKD)



## Actual correlation histogram





## Setup, results and comparison with model





## Key rate limits depending on jitter



## Key rate limits depending on dark counts



#### References

Neumann et al.: Model for optimizing quantum key distribution with continuous-wave pumped entangled-photon sources, *Physical Review A*, 104, 022406 (2021) Ma et al.: Quantum key distribution with entangled photon sources, *Physical Review A*, 76, 012307 (2007)

