

# PROJECT / Practical Quantum Communications P-Quantum

## Main Objective:

- To perform a field trial experiment over installed fibers in the city of Aveiro, using single and entangled photon-pairs to implement quantum protocols for message authentication and fair contract signing;
- To propose quantum protocols suitable for real quantum channels, for privacy problems that cannot be solved with quantum key distribution, namely the authentication of messages and fair contract signing.
- To develop the interest and expertise in quantum telecommunications in Portugal, both at the theoretical and the experimental levels, in order to develop internationally-competitive research and train new human resources in this new and strategically important area for secure telecommunications.

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