



Host Institute: University of Padova

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Starting date: October 2017

Duration: 3 years

Project Description

This project concerns the study of QC over links in space using satellites and ground telescopes. The relevance of satellite optical communications has been demonstrated in a number of successful tests, encouraging the extension of space optical links, but at the same time posing a serious concern on the privacy of such communications and its resilience to attacks. QKD over satellite links is on the verge of passing from the pioneering research to implementations for a full-fledged demonstration. The project will investigate protocols that optimize the space-channel specific characteristics required for post-processing, for both discrete and continuous-variable QKD. Moreover, the project will extend the modelling of the link with respect to the ground and space terminal specifications and the interface with secure terrestrial networks.

Project Outcomes

To be updated.