

List of Tables

2.1	BB84 QKD protocol [Mélen, 2016].	15
2.2	Security of the BB84 QKD protocol under intercept-resend attack. [Mélen, 2016]. . .	16
3.1	Relation between the measurement outcomes of the sender and the unitary operations applied by the receiver to implement probabilistic remote state preparation using different initial states.	32
3.2	Relation between the measurement outcomes of the sender and the unitary operations applied by the receiver to implement deterministic remote state preparation using different initial states.	36
3.3	Table for reconstruction of the quantum state for JRSP. Protocol to be followed for shared states of the form $GHZ_i \in \{GHZ^{0\pm}, GHZ^{1\pm}\}$ is slightly different from that for the shared state of the form $GHZ_i \in \{GHZ^{2\pm}, GHZ^{3\pm}\}$	37
4.1	Single-qubit-based and entangled-state-based protocols for various tasks related to secure quantum communication.	53
6.1	Link Parameters for uplink, downlink and intersatellite links	110
6.2	Critical distance for different protocols under consideration [km]	110
6.3	Maximum possible secure rate for different protocols under consideration [Bits/Pulse] 111	111