Perspectives of Satellite based Quantum Key Generation-Distribution from a Geo satellite <u>platform</u>

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Abstract

The surge in quantum science and technology based research are promising to bringing in newer dimensions to the current technology in practices. In that aspect, activities towards achieving an unconditionally secured are gaining momentum through quantum science and technology. Satellite based (SB) quantum key generation and distribution (QKgD) becomes an indispensable platform to address the limitation arises from the ground and terrestrial based QKgD nodes separated by long distance. The talk will give an overview of perspective and system elements of a Satellite based QKgD from a Geo Satellite platform.