

Overview of Japanese project “SIP” and quantum secure cloud technologies

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Abstract

We present quantum secure cloud technologies which protect critical data securely for a long time with high availability, and provide near optimal computing services with quantum-classical hybrid solvers in a secure manner.

To realize these functions, we have integrated QKD, secret sharing, post-quantum cryptography, secret computing, as well as codesign middleware for getting various quantum and classical computers work together. We overview current status of deployment and standardization of quantum secure cloud.
