Abbreviation	Meaning
$\|\uparrow e\rangle$	Electron : Status of Up
$\|\uparrow h\rangle$	Hole：Status of Up
$\|\Uparrow H\rangle$	Hydrogen Spin：Status of Up
^{12}C	Spin-O Carbon Nuclei
AES	Advanced Encryption Standard (AES) is a widely used cipher used for symmetric cryptography operations.
AMP	Microwave Amplifier
AOM	Acousto-Optic Modulator
AWG	Arbitary Waveform
BK	Barrett-Kok Protocol
BP	Bell Pair
BR	Radiative Branching Ratio
C_eNOT_H	Electron Spin Selective Nuclear Spin
ChaCha	ChaCha is another family of ciphers widely used in symmetric cryptography operations.
C_HNOT_e	Hydrogen Nuclear Spin as the Control and the Electron Spin
Coherence	The coherence of a qubit, roughly speaking, is its ability to maintain superposition over time.
CPA	Coherent Perfect Absorber (RFS0011)
Cryptography	Cryptography is the practice and study of techniques for secure communication in the presence of adversarial behavior.
CRYSTALS-Kyber	RYSTALS-Kyber, or simply Kyber for short, is a lattice-based post-quantum KEM.
CW	Continuous-Wave
DCR	Dark Count Rate (RFS0011)
DE	Detection Efficiency (RFS0011)
DI	Detector Interface (RFS0011)
Diffie-Hellman key exchange	Diffie-Hellman key exchange is an alternate method for establishing a symmetric key between Alice and Bob which involves a public and private key pair for both Alice and Bob.
Digital Signature	A digital signature is akin to a human signature for digital data.
ECC	Elliptic-curve cryptography (ECC) refers to public-key cryptosystems which make use of an object from mathematics known as an elliptic curve.
Entanglement	Quantum entanglement is the physical phenomenon that occurs when a group of particles are generated, interact, or share spatial proximity.
Entropy	entropy to refer to the genuine randomness produced by quantum noise the we leverage to add an extra layer of security to our cryptographic keys.
EOM	Electro-Optic Modulator
FedRAMP	Federal Risk and Authorization Management Program
FIPS	FIPS are standards and guidelines for federal computer systems that are developed by National Institute of Standards and Technology (NIST) in accordance with the Federal Information Security Management Act (FISMA) and approved by the Secretary of Commerce.
$g_{HBT(\tau)}$	Hanbury Brown and Twiss Second Order Correlation Function
$g_{HOM,I(D)}$	Second Order Cross-Correlation Function
Grover's Algorithm	Grover's algorithm is a quantum search algorithm developed in 1996 by Lou Grover that gives a quadratic speedup for computing the pre-image of any black box function.
GS	Ground State
HBT	Hanbury-Brown-Twiss
HOM	Hong-Ou-Mandel
IETF	he Internet Engineering Task Force (IETF) is a standards organization for the internet and is responsible for the technical standards that make up the internet protocol suite.
KEM	A key encapsulation mechanism (KEM) is very similar to PKE, but includes the generation of the symmetric key, or "shared secret," directly within the protocol.
LER	Logical Error Rate
LNA	Low-Noise Amplifier
Logical QuBit	A logical qubit is a physical or abstract qubit that performs as specified in a quantum algorithm or quantum circuit subject to unitary transformations
MW	MicroWave
NISQ	Noisy Intermediate Scate Quantume
NIST	National Institute of Science and Technology

Abbreviation	Meaning
NIST Post-Quantum Cryptography Standardization	NISTIR 8413, Status Report on the Third Round of the NIST Post-Quantum Cryptography Standardization Process is now available.
NSA	National Security Agency: A federal government intelligence agency that is part of the United States Department of Defense.
OCDE	On-Chip Detection Efficiency (RFS0011)
ODMR	Optically Detected Magnetic Resonance
Pcell	Parameterized Cell
PD	Photodiode
Physical QuBit	physical device that behaves as a two-state quantum system
PKE	Public-key encryption refers to a scheme where Bob can encrypt a message to Alice using her public key.
PLE	Photoluminescence Excitation
PMU	Processing and Measurement Unit, (RFS0024), feeding executable binaries
POL	Polarization Control
PQC	Post-quantum cryptography (PQC), also known as quantum-resistant cryptography
QEC	Quantum Error Correction
QKD	Quantum Key Distribution
QLDPC	Quantum Low-Density Parity-Check
QPE	Quatnum Phase Estimation
QRNG	Quantum random number generation. It uses noise to generate genuinely random numbers.
Quantum Algorithm	An algorithm is a collection of instructions that allows you to compute a function
Quantum Readiness Index	This is a tool that is used to determine if an organization is quantum-safe.
Quantum Sensing	Quantum sensors are expected to have a number of applications in a wide variety of fields including positioning systems
Quantum Supremacy	Proof that the quantum computer is superior to the classical computer, based on tasks and outcomes.
Quantum-Safe	Uses math believed unbreakable by future quantum computers but will be broken eventually.
Quantum-Secure	Unconditional security against classical and quantum computers.
Qubit	A quantum bit or qubit
RSA	The Rivest-Shamir-Adelstein (RSA) cryptosystem is one of the first instances of a public-key cryptography scheme.
RT	Room Temperature
SC	Superconductor
SDE	System Detection Efficiency (RFS0011)
SHFSG	Super-Heterodyne Frequency conversion scheme Signal Generator
Shor's Algorithm	Besides Grover's algorithm, Shor's algorithm is the other quantum algorithm with implications on cryptography.
SMU	Current Source for SNSPD in iPhoton team
SNDL	Store-Now Decrypt-Later, also called Harvest-Now, Decrypt-Later (HNDL)
SOI	Silicon-on-Insulator
Superposition	A fundamental principle of quantum mechanics stating that, like waves in classical physics, quantum states can be added together – superposed – to yield a new valid quantum state: and conversely
T_2	Coherence Times of the Electron and Nuclear Spins With a Ramsey Pulse Sequence
TC	T Centre
tCNOT	teleported CNOT
TW	Travelling Wave (RFS0011)
TX_0	State With an Unpaired Hole Spin
VOA	Variable Optical Attenuator
X_e	Electron π-Pulse
Y2Q	"Years to Quantum", is the moment of uncertainty when we could lose digital security.