Wednesday, February 15, 2023 9:40 AM – 10:00 AM *Quantum Readiness, Quantum Computing, Quantum Safe Area* 

## **Charles W. Robinson**

Worldwide Leader IBM Quantum Safe Team

## Abstract:

By decade's end, practical quantum computing solutions could impact computing strategies across industries. What does this mean for our nation's leaders? Over the upcoming government funding cycles, quantum computing will profoundly alter how we secure our digital data fabric through cryptography. Developing quantum encryption capabilities is crucial to maintaining cybersecurity and integrity for your critical applications and data.

The quantum computing era will unfold over time, but the need for quantum-safe solutions is immediate. In fact, both the historic and current complexity of cryptosystems—even pre-quantum computing—can require several years of strategic planning, preparation, and remediation. Business, technology, and security leaders face an urgent need to develop a quantum-safe strategy and quantum-computing roadmap now.

This talk will highlight many current use cases that take advantage of quantum computing performance, the physics that make it possible, and the crypto capabilities being developed that promote a quantum ready posture.