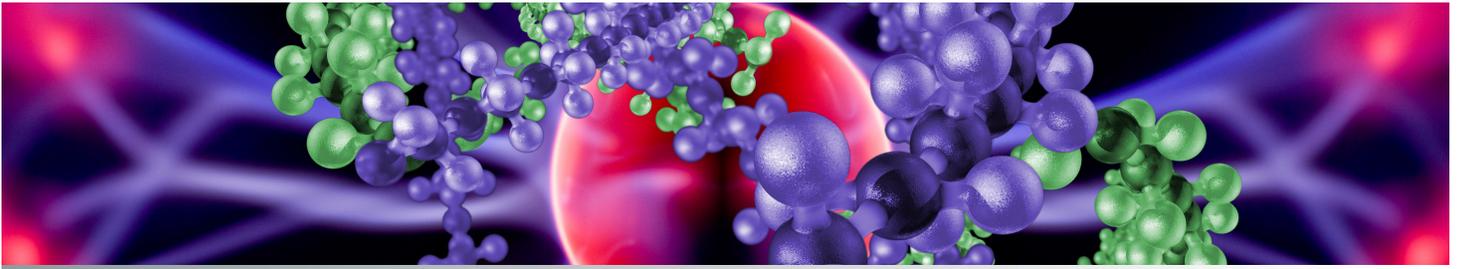


Method of Adding Nodes to Quantum Key Distribution Systems



UT-B ID 201202846

Technology Summary

Quantum key distribution (QKD) is a transformative technology that allows two parties to generate shared secret bits for encrypted communication in a manner that is, in theory, secure against any current or future method of eavesdropping. Despite these fundamental advantages, QKD has seen only limited implementation, primarily because the point-to-point nature of QKD renders it too expensive for multiclient applications. This particular technology is a method that improves the cost and accessibility of QKD through a novel technique that significantly increases the number of clients that can be supported by a conventional QKD system—with only a modest increase in cost. The technique can be applied to any type of QKD implementation.

Patent

Patent in preparation.

Inventor Point of Contact

Warren P. Grice
Computational Sciences and Engineering Division
Oak Ridge National Laboratory

Licensing Contact

David L. Sims
Commercialization Manager
UT-Battelle, LLC
Oak Ridge National Laboratory
Office Phone: 865.241.3808
E-mail: simsdl@ornl.gov