

Dr. Li's Quantum Information Science Lab

Are you interested in exploring concepts from Quantum Mechanics, Electrodynamics, and Optics? Do you want to understand why atoms can be used to generate “spooky-action-at-a-distance,” how photons can carry quantum information, and what an “entangled state” looks like when measured? If you're eager to gain both theoretical and experimental knowledge in areas such as atomic physics, quantum optics, electronics, laser systems, and programming, consider joining Dr. Li's Quantum Information Science and Technology group. You'll work in a cutting-edge quantum information science lab, operate state-of-the-art instruments, conduct exciting experiments, and have the opportunity to publish your work in peer-reviewed journals.

In Dr. Li's lab, you will use atomic vapor and nonlinear optical crystals to generate quantum correlations and entanglement for quantum control, quantum sensing, and quantum networking research.

Dr. Tian Li is an Assistant Professor of Physics at the University of Tennessee at Chattanooga (UTC), specializing in experimental quantum information science. Dr. Li also serves as the CTO of the UTC Quantum Center and is leading quantum control and networking research in the UTC Quantum Node Lab which provides access to the world's first software-programmable quantum network – the EPB Bohr-IV Quantum Network in downtown Chattanooga. Dr. Li's research is funded by the NSF ExpandQISE and NIST STRS programs, both as Principal Investigator.