

I am an assistant professor in the Department of Physics and Astronomy at UNLV, specializing in experimental atomic, molecular, and optical (AMO) physics. My research focuses on using precision spectroscopy methods to explore fundamental symmetries and the evolution of the interstellar medium in the universe. My current project, titled "Advancing Mid-Infrared Tunable Laser Technology: Achieving Sub-Kilohertz Precision for Spectroscopy of Interstellar Molecules," aims to develop a cutting-edge mid-infrared tunable laser system with sub-kilohertz precision. This highly accurate optical system will facilitate significant collaborative research with the University of Louisville, MIT, and NASA laboratories, specifically targeting saturation spectroscopy of interstellar molecules.