Summer of Molecular Quantum Information Seminar Series 2024

A virtual seminar series for graduate students and postdocs studying quantum information science with an emphasis on quantum sensing and molecular qubits. We aim to maintain a kind, supportive, and active audience with the objective of building a community across disciplines with similar research goals. We will meet over Zoom on Wednesdays at 1PM CDT from June 5th to August 21st, 2024.

Date	**Speaker**	**Title**	**Group**
June 5	Daniel Laorenza	*Designing molecular analogues of optically addressable solid-state qubits*	Mason Group, Harvard University
June 12	Che Wu	*Group 10 metal dithiolene complexes as molecular qubit precursors*	Donahue Lab, Tulane University
June 19	Juneteenth, no seminar	–	–
June 26	Nathan Loutsch	*Mechanistic Insights into the C-C Cross-Coupling of Pyrazine and the Formation of a Decanuclear Organometallic Dy(III) Complex*	Vlaisavljevich Group, University of Iowa
July 3	Pawel Wojcik	*Processing quantum information with laser-cooled molecules*	Krylov Group, University of Southern California
July 10	Timothy Krogmeier	*Predicting molecular spin dynamics using electronic structure and open systems methods*	Head-Marsden Group, University of Minnesota
July 17	Cindy Serena Ngompe Massado	*Tuning Chromium(IV) Color Centers for Sensing Environments*	Freedman Group, MIT
July 24	Irma Avdic	*Entanglement polytopes for quantum sensing*	Mazziotti Group, University of Chicago
July 31	Lorenzo Mariano	*Ab initio simulation of spin-phonon relaxation time in molecular qubits*	Quantum Materials Dynamics (Lunghi) Group, Trinity College Dublin
August 7	Valerio Briganti	*Decoherence in molecular qubits by cluster correlation expansion*	Quantum Materials Dynamics (Lunghi) Group, Trinity College Dublin
August 14	Titir Das Gupta	*Chlorine incorporation to mitigate decoherrence*	Donahue Lab, Tulane University
August 21	Steven Diaz	*Utilizing Entangled Photons in Stimulated Raman Scattering*	Frontiera Lab, University of Minnesota