

# Pressure & Field: The keys to unlock exotic states in quantum materials

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Understanding the phase diagrams of quantum magnets is a crucial foundation for exploring and realizing various types of exotic quantum states. Systems that lie close to phase boundaries are particularly interesting because they can be tuned relatively easily between competing quantum ground states by experimental knobs such as pressure and magnetic field. In this talk we present our latest results obtained under extreme sample environments of high-pressure, high-magnetic field, and low-temperature for a selection of frustrated quantum magnets and discuss the future path forward.