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Emergent quasiparticle excitations in quantum spin liquids

This lecture gives a brief introduction to quantum spin liquids that intrinsically host substantial entanglement of local spins, manifested by emergent quasiparticle excitations, spin fractionalization, gauge fluctuations, and topological properties. I will outline recent observations of emergent quasiparticles, such as photons, monopoles, and Majorana fermions, in frustrated magnets using thermal transport.