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Spin Correlations in Quantum Spin Liquids on the Kagome Lattice TYLER DODDS, YONG BAEK KIM, University of Toronto — The spin-1/2 Heisenberg kagome antiferromagnet, due to its highly frustrated nature, is considered a prime candidate to realize a spin-liquid ground state that breaks no symmetry and hosts fractionalized magnetic excitations. Recent numerical results indicate a close competition for the ground state between different spin-liquid states. We study spin correlations in competing phases, suggest possible experiments to distinguish different ground states, and discuss the application of these ideas to Herbertsmithite.

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