

COLLOQUIUM

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[ABSTRACT]

I will discuss spin models of magnets and superconductors, with spins in the circle (XY model) and in the sphere (Heisenberg model)—with interesting phase transitions. I will discuss work with Elizabeth Meckes on the mean-field Heisenberg model and its non-normal behavior at the phase transition. There is much that is still unclear about these models; I'll mention work in progress with Tayyab Nawaz and Leslie Ross.