

Abstract Submitted
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Superconductivity and magnetism in heavy-fermion systems

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— Recent experiments on CeCoIn_5 have observed coexisting superconductivity and magnetic order under an applied magnetic field near the Pauli limit. Motivated by such observations, we study the interplay between pairing and magnetism in the $\text{SU}(N)$ Kondo lattice model, believed to provide an accurate description at low temperatures of such heavy-fermion systems. We present results for the phase diagram as a function of temperature and magnetic field.

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