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**A common thread linking the heavy-fermion, cuprate and iron superconductors<sup>1</sup>**

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Is the pairing interaction which is responsible for superconductivity in the heavy-fermion, cuprate and iron-pnictide materials similar or different? These materials come in families which contain quasi-2D layers of correlated d or f electrons. Their phase diagrams show antiferromagnetism or SDW phases in close proximity or coexisting with superconductivity. The ratio of their superconducting transition temperatures  $T_c$  to the Fermi energy or coherence scale is similar and large relative to that of the traditional electron-phonon superconductors. The resonant peak observed in inelastic neutron scattering experiments in the superconducting phase provides a signature for an unconventional gap. Single and multi-band Hubbard models have been found to describe a number of the observed properties of these systems. Here, based on the experimental phenomenology and studies of the momentum and frequency dependence of the pairing interaction for Hubbard-like models, we suggest that spin-fluctuation mediated pairing is the common thread linking this broad class of superconducting materials.

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