Correlated Normal States and their Emergent Superconductivity

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Recent advances in electronic structure are finally begining to enable the understanding of different types of correlations and how they impact the resulting superconductivity starting from first principles. We will give an overview of recent insights on this problem, with examples drawn from interesting classes of materials including BaKBiO3 and LiFeAs. We will conclude with some perspectives on the challenge of assisting in the design of new materials.