

Spin and charge correlations in two-dimensional correlated-electron metals

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This talk will provide an overview of spectroscopic experiments on the electronic properties copper-oxide high-temperature superconductors, focusing on recent insights into spin and charge ordering and their competition with superconductivity [1-5]. We will compare and contrast the results with related experiments on spin, charge, and orbital correlations in nickel-oxide superlattices grown by pulsed laser deposition and molecular beam epitaxy [6-9]. The talk will conclude by outlining perspectives for the control of electron correlations in two-dimensional metals.

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