

Abstract Submitted
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A DMFT study of Na_xCoO_2 CHRIS MARIANETTI, GABRIEL KOTLIAR, Rutgers University — Various recent experiments have roughly mapped out the phase diagram of Na_xCoO_2 (versus x) in an effort to understand the basic electronic structure. Interestingly, the magnetic susceptibility has been observed to be Curie-Weiss- like near NaCoO_2 , and Pauli-like near CoO_2 . This is counterintuitive given that NaCoO_2 is believed to be a band insulator, and CoO_2 is in the vicinity of the hydrated superconductor. LDA+DMFT calculations are presented in order to shed light on why signatures of correlations (ie. Curie-Weiss behavior) are observed near what is believed to be a band insulator (ie. NaCoO_2).

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