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**The low-energy ARPES and heat capacity of $Na_{0.3}CoO_2$: A DMFT study** CHRIS MARIANETTI, Rutgers University, OLIVIER PARCOLLET, CEA Saclay, KRISTJAN HAULE, GABRIEL KOTLIAR, Rutgers University — We use DMFT to calculate the ARPES spectrum and heat capacity for $Na_{0.3}CoO_2$. Both the traditional Hirsch-Fye (HF) Quantum Monte-Carlo technique and the newly developed continuous time (CT) quantum Monte-Carlo technique are used to solve the DMFT impurity problem. We show that the $e_g$' hole pockets on the Fermi surface are destroyed as the on-site coulomb repulsion is increased. Additionally, we show that quantitative agreement with both ARPES and heat capacity can be achieved.

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