

Abstract Submitted  
for the MAR14 Meeting of  
The American Physical Society

**Mott-Hubbard vs Charge-Transfer Insulating Behavior in the CuO<sub>2</sub> Plane** GIOVANNI SORDI, Royal Holloway Univ of London, PATRICK SEMON, Universite de Sherbrooke, A.-M. S. TREMBLAY, Universite de Sherbrooke and Canadian Institute for Advanced Research — High temperature superconductivity emerges in the CuO<sub>2</sub> plane upon doping a Mott insulator. The Mott insulating state occurs in different regimes, Mott-Hubbard insulator and charge-transfer insulator. The latter is relevant especially for hole-doped cuprates. Within a three-band model we can explore both charge-transfer and Mott-Hubbard systems. Here we study the metal-insulator transitions in a three-band copper oxide model within cluster dynamical mean-field theory with continuous-time quantum Monte Carlo as an impurity solver. As a function of doping, charge-transfer energy and interaction strength, the normal state of this model shows the two types of metal-insulator transitions, metal to charge-transfer insulator and metal to Mott-Hubbard insulator.

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Date submitted: 15 Nov 2013

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